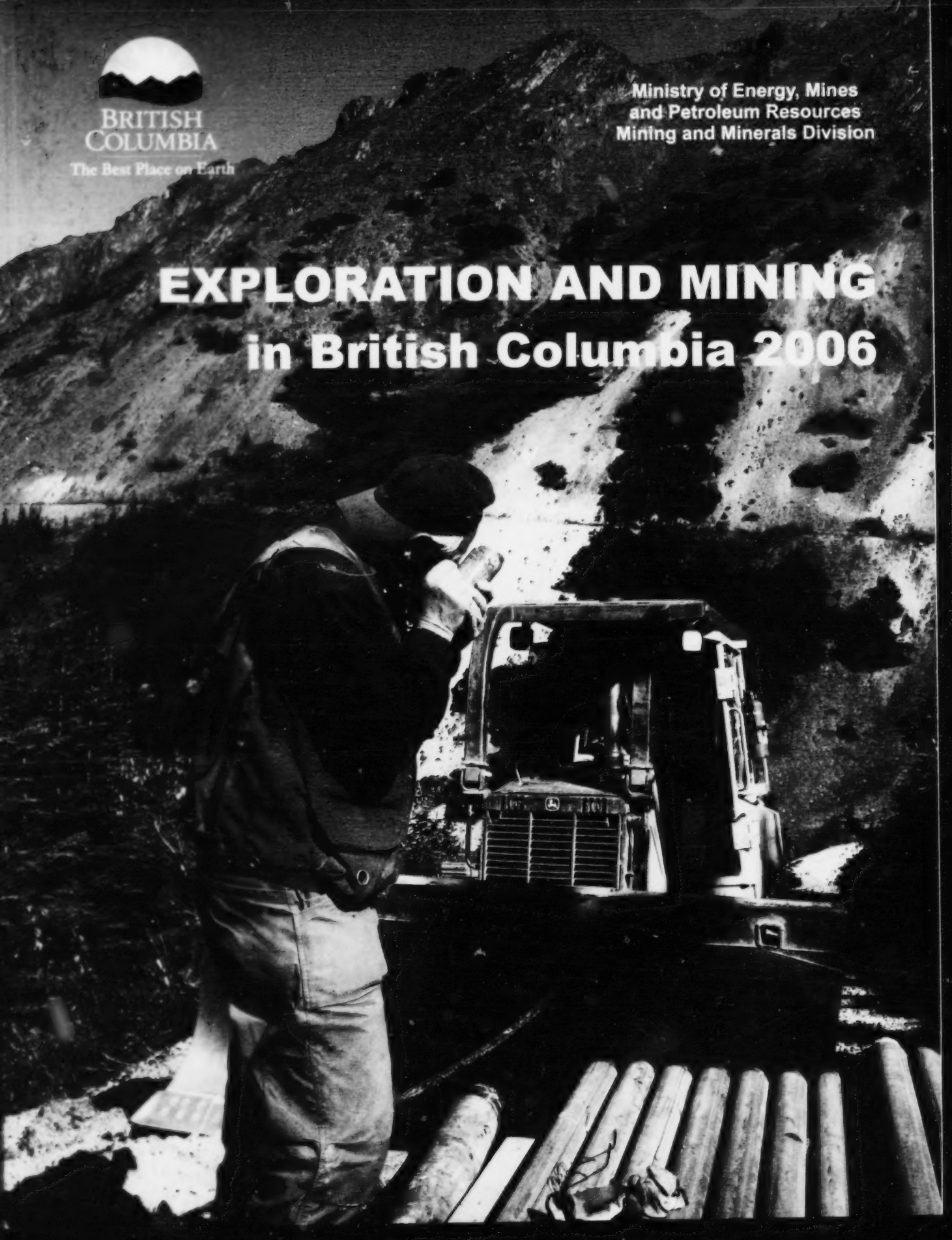
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The Best Place on Earth
Ministry of Energy, Mines and Petroleum Resources
Mining and Minerals Division
EXPLORATION AND MINING in British Columbia 2006

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Front Cover:
Eagle Peak Resources carried out an exploration drill program on their Big Onion porphyry copper property in the Smithers-Hazelton area. Lloyd Tattersall inspects drill core for chalcopyrite. Photo by Paul Wojdak.

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BRITISH COLUMBIA MINING AND MINERAL EXPLORATION OVERVIEW 2006

Ministry of Energy, Mines and Petroleum Resources

Tom Schroeter, PEng/PGeo; David Grieve, PGeo; Robert Lane, PGeo; Bruce Madu, PGeo; Bruce Northcote, PGeo; and Paul Wojdak, PGeo

INTRODUCTION

British Columbia's mineral resources are strategically located to be a significant asset for the international mining industry, particularly as a supplier for North American and Asian markets. The province has a well-defined potential for a wide variety of minerals and deposit types. The geoscience database is extensive and easily accessed and the provincial government is committed to aggressively improving that data and encouraging new developments. With attractive energy costs, a well developed, all-weather highway system, rail links and a number of deep-water ports, British Columbia has the infrastructure to cost-effectively get coal, minerals and resulting products to markets.

Mining is an important economic driver in British Columbia with production valued at more than $6 billion annually. There were 9 metal, 11 coal and approximately 40 major industrial minerals quarries and mines, numerous placer mines, and more than 1100 aggregate pits in operation during 2006.

Three mines opened during the year: the **Trend** and **Wolverine – Perry Creek** coal mines in the northeast, and the **Table Mountain** gold mine, in the northwest. Two new aggregate mines are under construction and two other metal mines are considering reopening in 2007. There are more than 25 project submissions to government seeking mine development and environmental approvals.

Sixty percent of Canadian exploration and mining companies are based in British Columbia, which has the world's largest concentration of exploration companies and mining professionals. In 2005, B.C.-based companies raised $3.2 billion in equity capital for mining or about 50% of the total equity capital raised for Canadian listed exploration companies.

Photo 1. The Wolverine (Perry Creek) coal mine opened in July, 2006.

During 2006, British Columbia benefited greatly from the ongoing international resurgence in mining, mine development and mineral exploration. B.C. is the Pacific Gateway to Canada, especially for providing products and services to Asian countries. For example, Chinese mining companies have recently made equity investments into several coal and metal projects in the Province.

Commodity prices for nearly all metals rose over the year, including gold, copper, molybdenum and zinc. Mineral exploration expenditures increased for the seventh consecutive year to approximately $265 million for 2006, up about 20% from 2005 (Figure 1). Mineral tenure acquisitions are forecast to reach a level of nearly 6 million hectares, an increase of about 20% over the previous year (Figure 2). This is the seventh year in a row that there has been an increase in mineral tenure recording.

Both the *Mining Exploration Tax Credit Program* and *Exploration Investment Tax Credit* for flow-through investors, provide additional incentives to help attract risk capital to the province. *MapPlace*, the British Columbia government's internet geoscience information system, had approximately 6 million hits during 2006, reflecting the strong and renewed interest in mineral resource exploration and development.

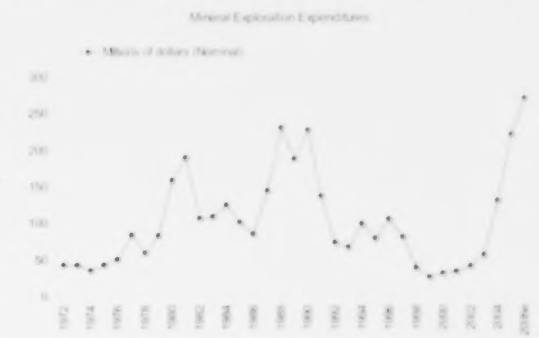

Figure 1. Mineral exploration expenditures (1971-2006).

Figure 2. Mineral tenure acquisitions 1990 – 2006. Mineral Titles Online launched in January 2005.

Mining companies are routinely discussing their proposed advanced projects with local communities and First Nations. Some important partnerships for development of mineral resources with local First Nations have already been signed, such as between the Tahltan First Nation and NovaGold Resources Inc for the **Galore Creek** project, and the First Nations with Polaris Minerals regarding the **Orca** project.

MINING HIGHLIGHTS

New mine openings and major expansions at some producers underline the improved economics of the sector throughout the Province (Figure 3). Gibraltar, Highland Valley Copper, Mount Polley and Trend are expanding their operations. British Columbia traditionally ranks third in Canada for the value of its mineral and coal production.

For 2006, B.C.'s forecast value of solid mineral production is $6 billion (Figure 4). This is an increase of 24% over 2005. Copper, for the first time in recent history, is the single most important mineral commodity by value, and coal is second (Figure 5). Other important commodities produced are molybdenum, industrial minerals, gold, construction aggregates, silver and zinc.

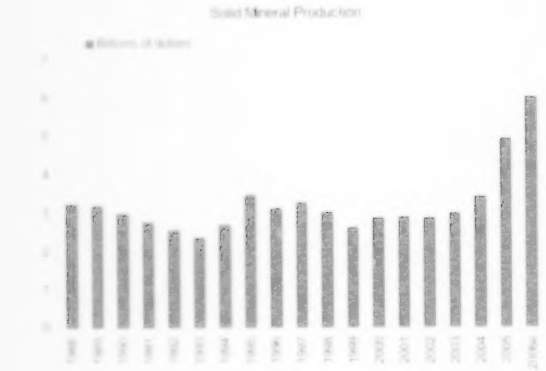

Figure 4. Solid mineral production value in British Columbia, 1988-2006.

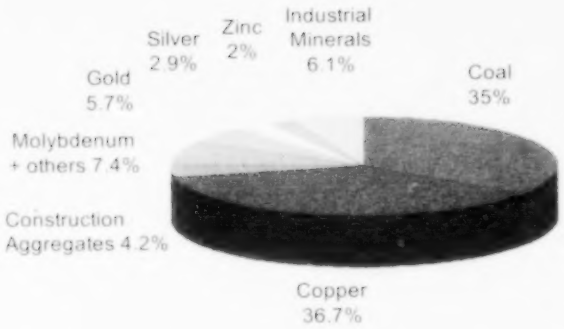

Figure 5. Forecast distribution of British Columbia mineral production by commodity – 2006.

Actual metals production decreased slightly for gold, silver, zinc and molybdenum; only copper production was higher. Coking coal and pulverized injection coal (PCI) production increased in the northeast to 1.6 million tonnes in 2006; however, in the southeast, it dropped significantly from 25.2 million tonnes to 21-22 million tonnes. This drop in the southeast production reflected reduced coal sales and delays related to new tire deliveries at mines and the availability of rail cars for coal transport. Forecast mine production and resources for 2006 are listed in Table 1.

Clean coal production for 2006 is expected to total 23 million tonnes, with a forecast value of approximately $2.1 billion. British Columbia has three major coal ports on the west coast - **Roberts Bank**, south of Vancouver, has a capacity of 26 million tonnes per year; **Neptune** terminals (Vancouver Port) has a capacity of 8 million tonnes per year and **Ridley Island** terminal, near Prince Rupert, has a capacity of 12 million tonnes per year. There was significant unused capacity for these coal ports. There is a fourth, deep water, ice-free port at Stewart, which may also benefit from increased exports.

British Columbia's industrial minerals production for 2006 (including sulphur) is estimated to be worth $365 million. The most economically significant industrial minerals in British Columbia are magnesite, white calcium carbonate, limestone, silica, dimension stone, gypsum, sulphur, construction aggregate, and crushed rock. Commodities produced in lesser quantities include jade (nephrite), magnetite, dolomite, barite, volcanic cinder, flagstone, industrial and medical/cosmetic clays, tufa, fuller's earth, bentonite, slag, mineral wool, roofing granules, graphite, and gemstones. There are at least 20 major sites throughout the province where upgrading of industrial minerals into value-added products takes place.

Structural materials production, including the important construction aggregate sector, is estimated to have a value of $250 million. There are aggregate operations throughout the province and they vary from large pits, which supply the major metropolitan areas to many smaller pits used locally for road construction.

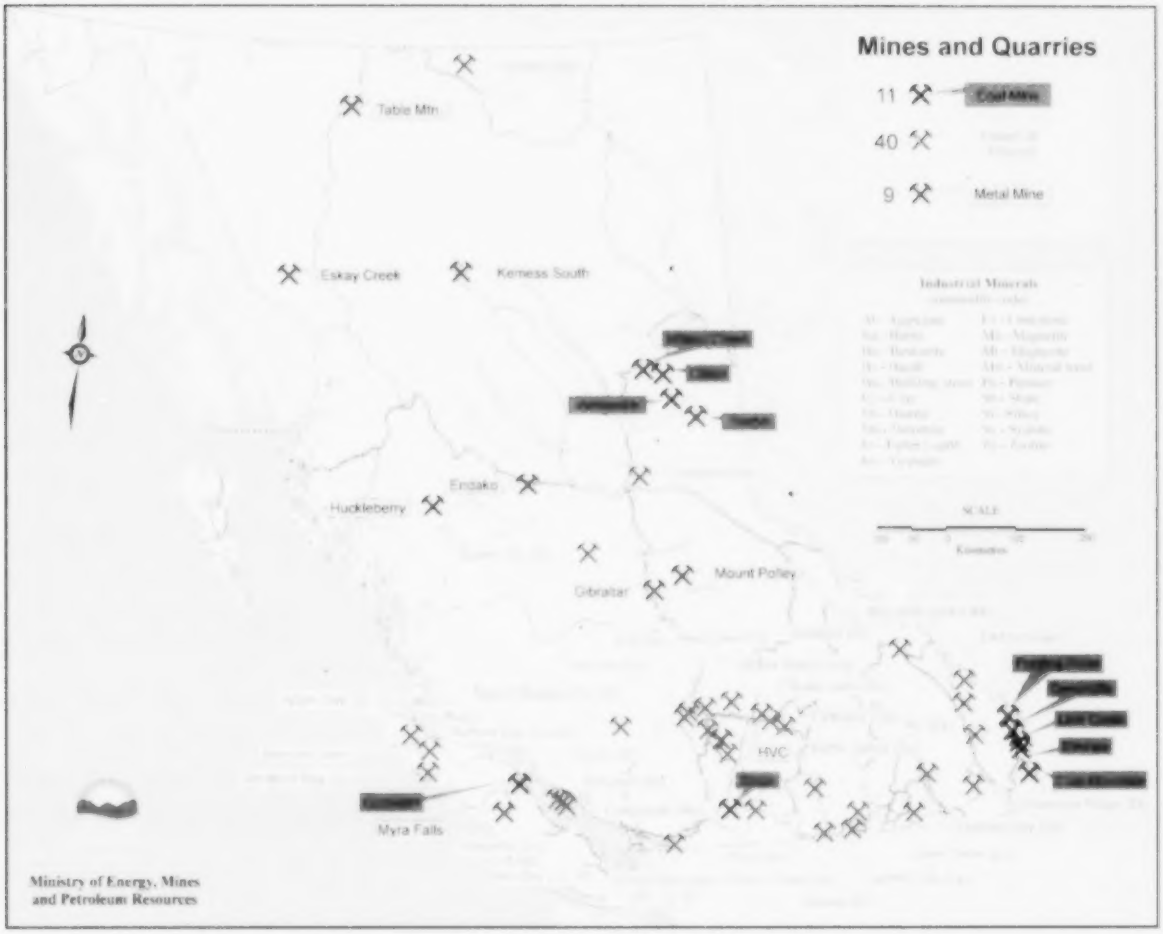

Figure 3. Mines and quarries 2006.

Placer gold production and exploration in British Columbia was concentrated in the Atlin, Dease Lake, Manson Creek, Cariboo and Fort Steele areas, but the majority of the operations are small and seasonal in nature.

The provincial mining industry employed a direct workforce of more than 10 000 people province-wide and generated jobs for another 15 000 contractor and spin-off workers as well.

Northwest - Major Mines

The **Eskay Creek** underground gold-silver mine, owned by Barrick Gold Corporation, is expected to produce 3500 kg of gold and 170 000 kg of silver during 2006. It is one of the world's largest silver producers and among the richest in terms of value per tonne of ore. The mine is projected to continue operations until early 2008.

The **Endako** open-pit molybdenum mine, now operated by Blue Pearl Mining Ltd, has been a low-cost producer for 36 years. Production during 2006 is forecast at 5480 tonnes of molybdenum. Mine life is estimated to be in excess of 7 years. In September, Blue Pearl Mining acquired the mine through acquisition of Thompson Creek Mining. They expect to develop the Davidson underground molybdenum mine near Smithers and ship ore to Endako.

The **Huckleberry** open-pit copper-molybdenum mine, operated by Huckleberry Mines Ltd, shipped concentrates through the port of Stewart to Japan. Production for 2006 is forecast at 34 000 tonnes of copper and 270 tonnes of molybdenum. The company has applied to mine an extension of the Main zone ore that would extend mine life to 2010.

The **Table Mountain** underground gold mine, operated by Cusac Mines Ltd, re-opened on December 14, 2006, after being closed for 7 years. The company expects to produce approximately 750 kg of gold during 2007.

Seasonal production of barite continued at the **Fireside** mine, located east of Watson Lake. Four jade properties (**Cassiar**, **Polar Jade**, **Provencher Lake** and **TJ**) were active in the Dease Lake and Cassiar areas.

Figure 1. Mines and quarries, 2006.

Project and production and exploration in British Columbia were concentrated in the Mine Dense Lake, Mount Klappan, Cariboo and Hope Skyride areas, but the majority of the operations are small and scattered throughout.

The provincial mining industry employed a direct workforce of more than 30,000 people, provided work and generated economic activity for another 25,000 contractors and service workers as well.

Northwest - Major Mines

The **Eskay Creek** underground gold-silver mine, owned by Barrick Gold Corporation, is expected to produce 3500 kg of gold and 175,000 kg of silver during 2006. Because of the world's record silver production and strong market prices, it ranks 2nd among silver producers in the province. The mine is projected to continue operations until early 2009.

The **Eskay** open-pit, underground mine, also operated by Barrick Gold Corporation, is expected to produce an 30 tonnes of gold during 2006. It is projected to be in service until 2009. Mine life is estimated to be in excess of 7 years. In September, Barrick Gold acquired the mine through acquisition of Placer Dome. They expect to develop the Deep East underground and Boundary main zone. Stockpiles and other ore to be milled.

The **Huckleberry** open-pit copper-gold-molybdenum mine, owned by Huckleberry Mines Ltd., started production during the year to Second to Export Production for 2006 is forecast at 33,000 tonnes of copper and 2.0 tonnes of molybdenum. The company has applied to mine an extension of the Main zone ore and would extend mine life to 2010.

The **Table Mountain** underground gold mine, operated by Tahtsa Mines Ltd., commenced on December 13, 2005, after being closed for 7 years. The company expects to produce approximately 250 kg of gold during 2006.

Stockpile production for Table commenced in July. **Eaglesnest** mine is expected to be placed on care and maintenance. **Cassiar Polar Jade Provencher Lake** and **Eaglesnest** mine is expected to be placed on care and maintenance.

Photo 2. Looking easterly over the Table Mountain gold mine which re-opened in December, 2006 (photo courtesy of Cusac Gold Mines).

Northeast - Major Mines

Western Canadian Coal Corporation continued to produce pulverized coal injection (PCI) coal from its **Dillon** open-pit mine. It produced 540 000 tonnes during 2006, but reserves were exhausted by late 2006. The company received an Environmental Assessment Certificate for its adjacent **Brule** PCI coal project in late 2006, and is preparing for production in 2007.

Northern Energy and Mining Inc (NEMI) opened the **Trend** metallurgical coal mine in January, 2006. They continue to explore the Roman Mountain area in order to increase the reserve base. The company plans to increase production from 240 000 to 2 million tonnes per annum in 2007.

Western Canadian Coal Corporation opened its **Wolverine** (Perry Creek deposit) metallurgical coal mine in September, 2006. Annual production is planned to be over 2 million tonnes in 2007. A large exploration program was also completed on its nearby **Hermann** deposit, which is in the Environmental Assessment Process.

In the fall, Pine Valley Coal Corporation suspended operations indefinitely at its **Willow Creek** mine that produces both metallurgical and PCI coal.

Central - Major Mines

The **Kemess South** open-pit mine, operated by Northgate Minerals Corporation, is expected to produce 9600 kg of gold and 36 000 tonnes of copper during 2006. It is the largest gold producer in the province. Existing reserves will provide mill feed until 2009. An in-fill drilling program confirmed continuity of mineralization immediately east of the Kemess South pit and an economic evaluation of the resource was initiated. The mine life could potentially be extended by more than ten years if the **Kemess North** deposit is put into production.

The **Gibraltar** open-pit mine, operated by Taseko Mines Ltd, is forecast to produce 23 000 tonnes of copper and 360 tonnes of molybdenum during 2006. Taseko recently announced a 40% increase in the mineral reserves as a result of a major diamond drilling program, particularly peripheral to the Pollyana and Granite Lake pits. The reserves include copper and molybdenum grades that are 5% and 11% higher respectively than previous reserve figures. The additional reserves could increase the mine life to more than 21 years. The company embarked on a $62 million mill expansion and restarted the solvent extraction-electrowinning leach plant.

The **Mount Polley** open-pit mine, operated by Imperial Metals Corporation, reopened in early 2005, and is forecast to produce 26 300 tonnes of copper, 1220 kilograms of gold and 14 000 kg of silver during 2006. Mining is from the Wight (Northeast zone) pit and the now-combined Cariboo and Bell pits. The Southeast zone is planned to start production in 2007. A leach pad was constructed to process approximately 200 000 tonnes of oxidized material from the Springer zone in 2007. Mine life is projected to 2011, with approximately 230 employees. The company also conducted a large, property-wide exploration program, including 23 000 metres of diamond drilling. Several new zones of copper-gold mineralization were intersected, including the C zone which is being considered for mining.

Lightweight Advanced Volcanic Aggregates Ltd, the new owner of the **Nazko** lava rock quarry near Quesnel, shipped a limited tonnage of previously screened and stockpiled materials to customers in the Lower Mainland.

Kootenays - Major Mines

Elk Valley Coal Corporation in southeastern British Columbia operates 5 coking coal mines, **Fording River, Greenhills, Line Creek, Elkview** and **Coal Mountain** providing it with flexibility to blend coals from different mines to meet customer needs. Over the past several years, these 5 mines have produced in excess of 25 million tonnes of coal annually and represent the province's largest solid mineral production commodity by value at approximately 38%. The company forecasts production of about 21.3 million tonnes during 2006. The Corporation, 62% owned by Fording Canadian Coal Trust

TABLE 1. FORECAST MINE PRODUCTION 2006

	Mine	Operator	Deposit Type / Commodity	Forecast Production in 2006 (tonnes or kilograms)	Proven and Probable Reserves (on Jan. 1, 2006)
Metals					
	Endako	Blue Pearl Mining Ltd & Soltz Moly Resources Inc.	Calcalkalic porphyry Mo	5460 t Mo	Endako Pit: 21 700 000 t at 0.069% Mo; Denak Pit: 22 700 000 t at 0.069% Mo; Stockpile 22 500 000 t at 0.046% Mo (Oct. 1, 2006)
	Eskay Creek	Barrick Gold Corp.	Transitional Epithermal-VMS Au-Ag	3500 kg Au, 170 000 kg Ag	243 000 t at 27.8 g/t Au and 1435 g/t Ag (Dec. 31, 2005)
	Highland Valley Copper	Teck Cominco Ltd / Highmont Mining Company Ltd.	Calcalkalic porphyry Cu-Mo	161 000 t Cu, 2000 t Mo, minor Au and Ag	318 700 000 t at 0.43% Cu and 0.008% Mo
	Gibraltar	Taseko Mines Ltd.	Calcalkalic porphyry Cu-Mo	23 000 t Cu, 360 t Mo	230 600 000 t at 0.318% Cu and 0.010% Mo
	Huckleberry	Huckleberry Mines Ltd / Imperial Metals Corp.	Calcalkalic porphyry Cu-Mo	34 000 t Cu, 270 t Mo	12 250 000 t at 0.526% Cu, 0.015% Mo (Dec. 31, 2005)
	Kemess South	Kemess Mines Ltd (Northgate Minerals Corp.)	Calcalkalic porphyry Au-Cu	9600 kg Au, 36 000 t Cu	68 030 000 t at 0.65 g/t Au & 0.21% Cu; Kemess North (Probable) 414 000 000 t at 0.31 g/t Au and 0.16% Cu
	Mount Polley	Imperial Metals Corp.	Alkalic porphyry Cu-Au-Ag	26 300 t Cu, 1220 kg Au, 14 000 kg Ag	40 980 000 t at 0.448 % Cu & 0.318 g/t Au
	Myra Falls	NVI Mining Ltd (Breakwater Resources Ltd.)	VMS, Zn-Cu-Au-Ag	750 000 t of 5.9% Zn, 1.1% Cu, 1.4 g/t Au, 42.9 g/t Ag	6 000 000 t at 6.4% Zn, 1.1% Cu, 1.43g/t Au, 46 g/t Ag
	Table Mountain	Cusac Gold Mines Ltd.	Mesothermal vein Au	Restarted Dec. 14 2006	40 000 t at 16.9 g/t Au
Coal					
	Basin	Compliance Energy Corp.	Thermal coal	42 000 t	
	Coal Mountain	Elk Valley Coal Corporation	Metallugical coal	2 000 000 t	26 000 000 t
	Dillon	Western Canadian Coal Corp.	PCI coal	500 000 t	579 600 t
	Elkview	Elk Valley Coal Corporation	Metallugical coal	4 800 000 t	246 000 000 t
	Fording River	Elk Valley Coal Corporation	Metallugical coal	8 100 000 t	239 000 000 t
	Greenhills	Elk Valley Coal Corporation	Metallugical coal	4 100 000 t	100 000 000 t
	Line Creek	Elk Valley Coal Corporation	Metallugical and thermal coal	2 300 000 t	17 000 000 t
	Quinsam	Quinsam Coal Corp (Hillsborough Resources Ltd)	Thermal & PCI coal	520-000 t clean coal	25 700 000 t (reserves and resources)
	Trend	NEMI Northern Energy & Mining Inc.	Coking Coal	200 000 t	1 680 000 t
	Willow Creek	Pine Valley Mining Corp.	Metallurgical & PCI coal	200 000 t PCI coal 150 000 t Coking coal	12 620 000 t (in-place measured and indicated; July, 2005)
	Wolverine	Western Canadian Coal Corp.	Coking Coal	550 000 t	32 730 000 t (Perry Creek deposit)

TABLE 1 CONTINUED

Industrial Minerals

Mine	Operator	Deposit Type / Commodity	Mine	Operator	Deposit Type / Commodity
4J	Georgia-Pacific Canada Inc	Gypsum	Kettle Valley quarries	Kettle Valley Stone Company	Ashlar, flagstone, thin veneer
Apple Bay	Electra Gold Ltd	Geyserite	Lime Creek	Imasco Minerals Inc	Limestone
Ashcroft	IG Machine and Fiber Ltd (IKO Industries Ltd)	Basalt roofing granules	Moberly	HCA Mountain Minerals (Moberly) Ltd	Silica sandstone
Benson Lake	Imasco Minerals Inc	Limestone	Monteith Bay	Lehigh Northwest Cement Ltd	Geyserite
Blubber Bay	Ash Grove Cement Corp	Limestone aggregate, dolomitic lst	Mount Brussilof	Baymag Inc	Magnesite
Bud	Absorbant Products Ltd	Bentonite	Mount Meager	Great Pacific Pumice Inc	Pumice
Buse Lake	Lafarge Canada Inc	Volcanic ash (alumina-silica)	Nazko	Lightweight Advanced Volcanic Aggregates	Lava rock
Craigmont	Craigmont Mines Joint Venture	Magnetite tailings	North Fork	Roxul (West) Inc	Syenite (mineral wool)
Crawford Bay	Imasco Minerals Inc	Dolomite	Pavilion	Graymont Western Canada Inc	Limestone
Decor	Pacific Bentonite Ltd	Burnt shale (alumina and landscape rock)	Red Lake	Absorbant Products Ltd	Diatomaceous earth, leonardite
Elkhorn	BPB Canada Inc	Gypsum	Rock Creek	Mighty White Dolomite Ltd	Dolomite
Falkland	Lafarge Canada Inc	Gypsum	Sumas Mountain	Clayburn Industries Ltd and cement manufacturer partners	Clay, shale and sandstone
Fireside	Fireside Minerals Inc	Barite	Swansea Ridge	Canadian Pacific Railway	Diorite (mineral wool)
Gilles Bay	Texada Quarrying Ltd (Lafarge Canada Inc)	Limestone, aggregate	Vananda	Imperial Limestone Company Ltd	Limestone
Giscome	Pacific Lime Products Ltd	Basalt (railroad ballast)	Winner	Roxul (West) Inc	Diorite (mineral wool)
Harper Ranch	Lafarge Canada Inc	Limestone	Z-2	Industrial Minerals Processors	Zeolite

and 38% by Teck Cominco Limited, is the world's second-largest supplier of seaborne metallurgical coal. Elk Valley Coal continues to adapt to changing market conditions and anticipates an increase in production during 2007.

During 2006, production of 90 000 tonnes of silica by HCA Mountain Minerals (Moberly) Ltd, was forecast from the **Mt. Moberly** mine, located near Golden. Northeast of Radium Hot Springs, Baymag Inc produces high-quality magnesite from its **Mount Brussilof** open-pit mine. Production in 2006 was projected to be 120 000 tonnes.

Farther south, BPB Canada Inc operates the **Elkhorn** gypsum mine, east of Windermere, and Georgia-Pacific Canada Inc produces gypsum from the **Four J** mine, southeast of Canal Flats. Production at the Elkhorn and Four J mines for 2006 was projected to be approximately 550 and 175 thousand tonnes, respectively. Imasco Minerals Inc produces a variety of crushed and ground rock products at its Creston Operations plant near Sirdar.

These products are derived from an underground dolomite mine at **Crawford Bay**, a limestone quarry at **Lime Creek** east of Salmo and a granite quarry at **Sirdar**. Mighty White Dolomite Ltd produces a range of crushed and ground dolomite products from its quarry and plant at **Rock Creek**. The **Winner** and **North Fork** quarries, west and north of Grand Forks, respectively, ship diorite and syenite-monzonite, respectively, to the Roxul (West) Inc mineral wool manufacturing plant in Grand Forks. The **Swanson** operation is the major railway ballast producer.

South-Central - Major Mines

The **Highland Valley Copper** open-pit mine near Kamloops, operated by Teck Cominco Limited (97.5%) and Highmont Mining Company (2.5%), is Canada's largest base metal mine. It is the fifth largest open pit mining operation in the world, with a daily mill throughput averaging 136 000 tonnes of rock. Production in 2006 is expected to be 161 000 tonnes of copper, 2000 tonnes of molybdenum and minor byproduct gold and silver. In 2006, a decision was made to extend the mine life from 2009 to 2013, and further extensions are being considered. Mining in the Highmont East pit, for higher grade molybdenum ore, re-commenced in late 2005. Teck Cominco is also considering building a modern hydrometallurgical smelter on site.

During 2006, Compliance Energy Corporation mined about 42 000 tonnes of thermal coal from its **Basin** property, near Tulameen. The site was placed on seasonal care and maintenance status in early September.

Over 250 people are employed at more than 15 industrial mineral mines, quarries and processing plants in the South-Central region. The **Kamloops** cement plant and **Harper Ranch** limestone quarry of Lafarge Canada Inc were expected to operate close to capacity in 2006. Near Cache Creek, Graymont Western Canada Inc operates the **Pavilion** limestone quarry and lime plant. Employing mainly First Nations workers, the operation produces lime used in pulp mills, mines and other industrial processes. The **Ashcroft** basalt quarry and roofing granule plant east of Ashcroft, operated by IG Machine and Fiber Ltd, produces about 250 000 tonnes of roofing granules in at least nine distinct colours. Craigmont Mines Ltd processes and recovers about 70 000 tonnes of magnetite annually from its **Craigmont** tailings operation near Merritt. The magnetite is used in most coal washing plants in western Canada.

Western Absorbant Products Ltd manufactures a variety of products at its plant in Kamloops, using raw materials from its **Red Lake** diatomaceous earth quarry northwest of Kamloops and its **Bud** bentonite quarry at Princeton. Zeolite was mined from Industrial Mineral Processors' **Z2** quarry near Cache creek and processed at a plant in Ashcroft. At Princeton, Heemskirk Canada Ltd processed zeolite from its **Zeo** quarry.

Opal Resources Canada Inc produces attractive fire opal gemstones and jewelry from its **Klinker** property, west of Vernon. Decorative rock and dimension stone are produced at numerous small quarries throughout the region (*e.g.*, **Begbie** quarry) by small companies. The Nipple Mountain quarry operated by Kettle Valley Stone Company in Kelowna is the best known and one of the largest of these operations.

Southwest - Major Mines

The **Myra Falls** underground mine, west of Campbell River, has been in operation for forty years, since 1966. The mine is operated by NVI Mining Ltd, a subsidiary of Breakwater Resources Ltd. Just over 750 000 tonnes of ore were estimated to be processed during 2006 in the mill, producing copper, zinc-silver and gold concentrates. Mill upgrades in 2006 have resulted in better zinc, copper and gold recoveries, as well as the production of a new lead concentrate. Early in 2006, the company reassembled its exploration department and a large, district-scale exploration program is underway.

The largest limestone production center in the province is **Texada Island**, where three quarries, **Gillies Bay**, **Blubber Bay** and **Vananda** are forecast to ship close to 6 million tonnes during 2006. White calcium carbonate is produced from **Gillies Bay** and also from the **Benson Lake** quarry on northern Vancouver Island. **Texada Island** limestone producers are capitalizing in the rapidly expanding market for crushed rock, the natural byproduct of their limestone operations. Construction Aggregates Limited ships aggregate from its facility at **Sechelt** to the San Francisco Bay area. Nineteen large aggregate quarries and pits in the Lower Mainland and coastal area are forecast to produce about 17 million tonnes in total in 2006.

Sumas Shale Ltd processes 500 000 tonnes of clay from its **Sumas Mountain** operation and Clayburn, Lafarge Canada Inc and Lehigh Northwest Cement Ltd produce shale and sandstone from their **Sumas** quarry. Ironwood Clay Company Inc produces cosmetic medical clay seasonally from its **De Cosmos Lagoon** quarry on Hunter Island, west of Bella Coola.

Westcoast Granite Manufacturing Inc, Margranite Industries and Matrix Marble Corporation operate stone-processing plants. Dimension stone is quarried from several locations, including **Skagit Valley**, **Whistler**, **Tahsis**, **Hardy Island**, **Fox Island**, **Gordon River**, **Hisnet Inlet** and **Haddington Island**. Great Pacific Pumice Ltd expects to produce as much as 20 000 tonnes of pumice from its **Pum** deposit at Mount Meager.

Electra Gold shipped approximately 120 000 tonnes of chalky geyserite (silica and alumina) from its **Apple Bay** property, west of Port Hardy, to supply cement plants in Vancouver and Seattle. On western Vancouver Island, Lehigh Northwest Cement produced 30 500 tonnes of silica-alumina product from its quarry at **Monteith Bay**.

Hillsborough Resources Ltd is forecast to produce some 520 000 tonnes of clean thermal coal from its **Quinsam** mine on Vancouver Island. As part of a long-term exploration project, drilling on the nearby Quinsam North property led to the identification of significant additional resources which could extend the current mine life beyond its 9 years.

MAJOR DEVELOPMENT PROJECTS

Since 2004, more than 10 mining projects have been permitted. As of December, 2006 there are 7 coal, 3 industrial mineral and 16 metal projects submitted to the government for consideration as mine developments (Figure 6 and Table 2).

All mine project proposals in British Columbia are required to have a Mine Permit and larger mines must also have an Environmental Assessment Certificate. Both these processes involve evaluation and approvals from multiple government agencies and consultation with communities and First Nations.

Both the **Swamp Point** and **Orca** sand and gravel, as well as the **MAX** molybdenum mine are under development, with production forecast in 2007. Other potential mine developments in the next two years could include **Brule**, **Hermann**, **QR**, **Sandon** and **Trend** (expansion).

Northwest - Major Development Projects

During 2006, Redfern Resources Ltd completed 23 000 metres of drilling at its **Tulsequah Chief** and **Big Bull** volcanogenic massive sulphide deposits, south of Atlin. The company holds a Development Certificate for the Tulsequah project. New areas were identified where mineral resources may be increased when incorporated into a new feasibility study.

Adanac Molybdenum Corporation released a feasibility study on its **Ruby Creek** molybdenum project, located east of Atlin. They also filed a *Project Report* to the B.C. Environmental Assessment Office (EAO), for a proposed open-pit mine with a 20 000 tonnes per day milling operation.

Photo 3. Looking southerly over the Galore Creek copper-gold-silver project (200-person base camp in the foreground).

East of Dease Lake, Western Keltic Mines Inc completed numerous surveys to support its Environmental Assessment Application for its **Kutcho Creek** project. The company proposes both open pit exploitation of the higher-grade core, along with underground development of the adjacent Esso West deposit. A pre-feasibility study is in progress.

At its **Mount Klappan** anthracite coal property, 75 kilometres southeast of Dease Lake, Fortune Minerals Limited continued several studies to support its Environmental Assessment Application. They have proposed a 1.5 to 3 million tonnes per year open-pit operation with a possible direct road route from the site to Highway 37. The company is also conducting a pre-feasibility study of building a 300 megawatt coal-fired power plant at the mine site that would be linked to the B.C. power grid.

In August 2005, beMetals Corp received an Environmental Certificate for its **Red Chris** copper-gold project, east of Iskut. Its feasibility study identifies the potential for a 30 000 tonnes per day milling operation, producing about 47 000 tonnes of copper and 2200 kilograms of gold annually, over a mine life of 25 years. In 2006, the company made an agreement with Jiangxi Copper Mining Company Ltd to develop the project. Since then, takeover bids have been filed by Imperial Metals Corp and Taseko Mines Ltd. In 2006, further confirmation drilling was carried out on the Main and East zones, and exploration drilling was completed on the nearby Gully zone.

Once again, the largest exploration program in the province was at the **Galore Creek** gold-copper-silver project, located southwest of Dease Lake. NovaGold Resources Inc filed its *Project Report* with the Environmental Assessment Office and released its feasibility study in October, 2006. Proven and probable reserves total 540 million tonnes, grading 0.557% Cu and 0.303 g/t Au at a cut-off grade of 0.25% copper equivalent, which are contained within a measured and indicated resource of 749 million tonnes grading 0.52% Cu and 0.3 g/t Au and 4.9 g/t Ag, at a 0.25% Cu-equivalent cut-off. Additional mineralization was discovered in the Bountiful zone, which lies at depth, and to the east of the proposed Central zone pit.

South of Stewart, Ascot Resources Ltd's **Swamp Point** aggregate project received approval. Construction has commenced in October and the quarry is expected to be in production in 2007. Initial deliveries of crushed and screened material will be made by barge to Prince Rupert for the port expansion project. The company continues to target the export market. At Stewart, Beacon Ventures Inc's **Bear River** aggregate project continued review under the Environmental Assessment Process. It proposes to extract 1.7 to 3.4 million tonnes of gravel annually

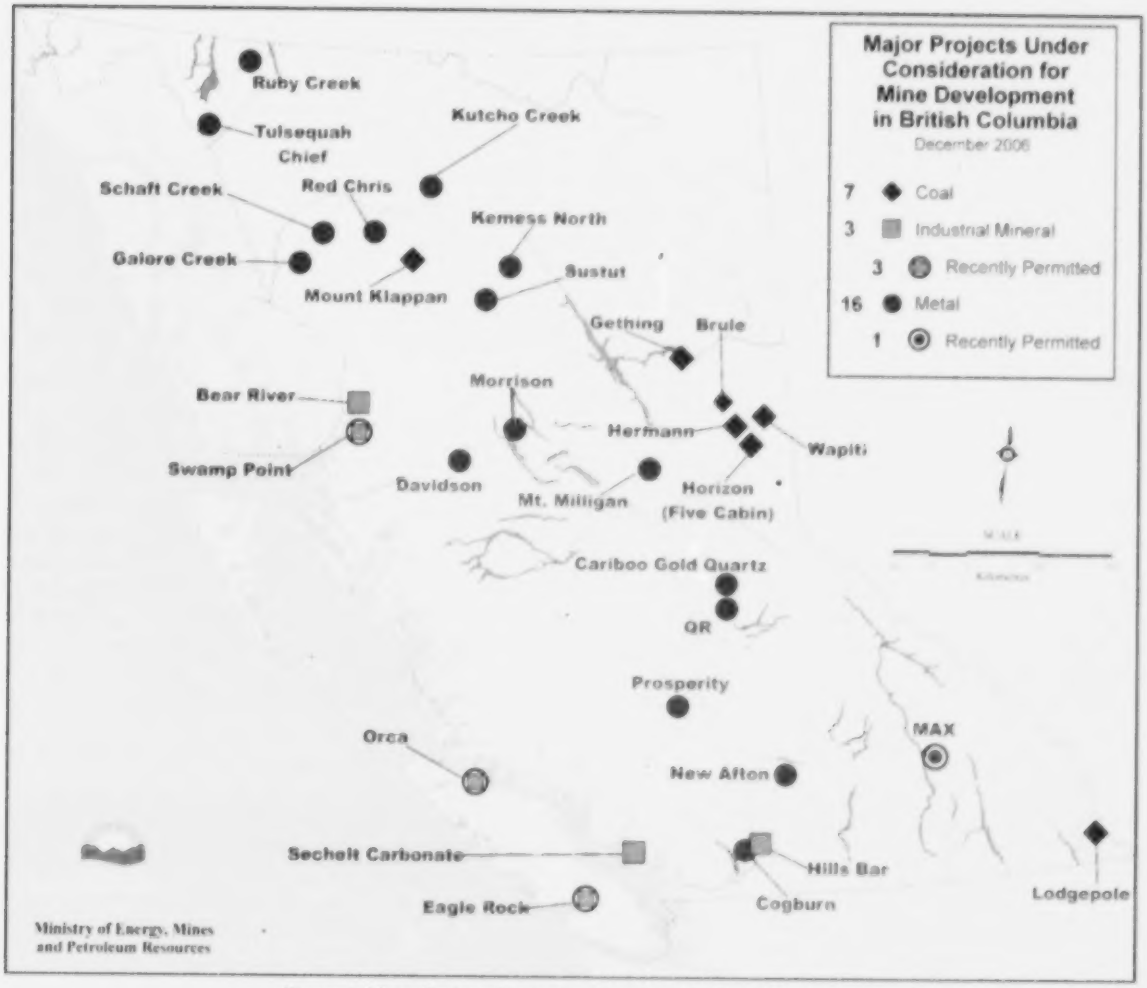

Figure 6. Major Projects Under Consideration for Mine Development.

Photo 4. Orca sand and gravel operation near Port McNeil, northern Vancouver Island. Preparation of new conveyor belt system.

from the Bear River. This project would not only produce gravel, but could reduce the annual flood hazard for the town of Stewart.

In the Smithers area, Blue Pearl Mining Ltd completed 2658 metres of in-fill underground drilling on its **Davidson** (Yorke-Hardy) molybdenum-tungsten property. The drilling defined a higher-grade portion of the resource (75.3 Mt of 0.177% Mo), and led to the discovery of the Lower Zone 300 metres below previous mineralized intersections. Blue Pearl now owns the Endako molybdenum mine which could process ore from the Davidson deposit. A feasibility study is expected by the end of 2007.

In the Babine camp, Pacific Booker Minerals Inc continued to study the feasibility of advancing its **Morrison/Hearne Hill** copper-gold project to production.

TABLE 2. MAJOR PROJECTS UNDER CONSIDERATION FOR MINE DEVELOPMENT IN BRITISH COLUMBIA, 2006

Project Name	Owner/Operator	Commodities
Bear River	Beacon Ventures Inc	Aggregate
Brule	Western Canadian Coal	Coal
Cariboo Gold Quartz	International Wayside Gold	Au
Cogburn	North Pacific Alloys Ltd	Mg
Davidson	Blue Pearl Mining Ltd	Mo
Galore Creek	NovaGold Resources Inc	Cu-Au-Ag
Gething	Canadian Dehua Int'l	Coal
Hermann	Western Canadian Coal	Coal
Hills Bar	Qualark Resources Inc	Aggregate
Horizon	Hillsborough Resources Ltd	Coal
Kemess North	Northgate Minerals Corp	Au-Cu
Kutcho Creek	Western Keltic Mines Inc	Cu-Zn-Au-Ag
Lodgepole	Cline Mining Corp	Coal
Morrison/Hearne Hill	Pacific Booker Minerals Inc	Cu-Au
Mount Klappan	Fortune Minerals Ltd	Coal
Mt. Milligan	Terrane Metals Ltd	Cu-Au
New Afton	New Gold Inc	Cu-Au
Prosperity	Taseko Mines Ltd	Au-Cu
Red Chris	bcMetals Corp	Au-Cu
Ruby Creek	Adanac Molybdenum Corp	Mo
Schaft Creek	Copper Fox Metals Ltd	Cu-Mo-Au-Ag
Sechelt Carbonate	Pan Pacific Aggregates Ltd	Limestone/dolomite
Sustut	Doublestar Resources Ltd	Cu-Ag
Tulsequah Chief	Redfern Resources Ltd	Cu-Zn-Au-Ag
Wapiti	Hillsborough Resources Ltd	Coal

Northeast - Major Development Projects

The Burnt River (Dillon) coal property includes the nearby 30-million tonne **Brule** deposit owned by Western Canadian Coal Corporation. The company received an Environmental Assessment Certificate for this deposit in 2006 and hopes to bring the mine into production in mid-2007. Western Canadian Coal also submitted its **Hermann** project to the Environmental Assessment Office, and are in the pre-application phase.

Peace River Coal Inc (Hillsborough Resources Corp, Anglo Coal Canada Inc and Northern Energy and Mining) completed several studies to support their Environmental Assessment *Project Report* submission for their **Horizon** (Five Cabin) coal mine.

Canadian Dehua International Ltd conducted studies on its **Gething** project, northwest of Tumbler Ridge, in support of its Environmental Assessment application. Hillsborough Resources Ltd is completing a pre-feasibility study for its **Wapiti** open-pit and underground thermal coal project, northeast of Tumbler Ridge. It is proposed that the coal would be used to power a coal-fired power plant.

Central - Major Development Projects

In the Toodoggone region, Northgate Minerals

Corp's **Kemess North** project, near its Kemess South mine, is being reviewed by a joint Federal and Provincial panel. The review of Kemess North is expected to be completed by mid-2007. If approved, the combined operations of the mine and the Kemess North deposit could extend the mine life to 2020. Kemess North has proven and probable resources of 424 million tonnes grading 0.3 g/t Au and 0.155% Cu. During 2006, a large deep drilling program targeted the deep KN Offset and Kemess East zones.

Sable Resources Ltd completed a 20-hole drilling program on its Shasta epithermal gold-silver deposit, east of its Baker (Chappelle) mine. In 2005, Sable produced 15 kg of gold and 321 kg of silver from an open cut at Shasta. The company plans to mine high-grade ore in 2007 and will utilize its nearby 100-tonne-per-day mill and tailings facility at Baker.

Cross Lake Minerals Ltd collared a portal and commenced drifting towards the North zone mineralization at its dormant QR gold-skarn mine, located southeast of Quesnel. The current measured and indicated resource totals 670 500 tonnes grading 4.9 g/t Au. The company hopes to be able to add significant tonnage to this by conducting detailed underground drilling. The company received government approval in December to restart the mine; production is scheduled for the summer of 2007.

In the Wells-Barkerville gold belt, International Wayside Gold Mines Ltd conducted pre-feasibility studies of the Bonanza Ledge gold deposit on its **Cariboo Gold Quartz** property. The company plans to operate an open-pit mine with replacement and vein-type resources estimated at 250 000 tonnes grading 7.3 g/t Au.

South-Central - Major Development Projects

Taseko Mines Limited completed a scoping study as part of its revised feasibility study on its **Prosperity** copper-gold project, southwest of Williams Lake. Ongoing ground and research work to support the company's Environmental Assessment Application was completed. Measured and indicated resources are estimated at 491 million tonnes grading 0.43 g/t Au and 0.22% Cu.

Northwest of Clinton, J-Pacific Gold Inc completed a drilling program aimed at identifying additional resources which might lead to a decision to re-start the mill at its **Blackdome** gold-silver epithermal vein deposit.

The historic **Bralorne** mesothermal gold mine near Goldbridge was the focus of considerable underground and surface drilling by Bralorne Gold Mines Ltd. Drilling tested the Maud's structure, the Noelton Vein and the King-Bralorne Mine gap.

Almaden Minerals Ltd completed infill drilling at the WD vein on its past-producing **Elk** gold-silver mine, 45 kilometres southeast of Merritt. Additional holes tested the Siwash East and B zones. The company owns a 100 tonne-per-day mill and hopes to put the mine back into production in the next few years.

In the Kamloops region, New Gold Inc completed about 30 000 metres of surface and underground drilling on its **New Afton** porphyry copper-gold-silver deposit. The deposit sits directly beneath an open pit from which there was production from 1977 to 1987. Combined measured and indicated resources are estimated at 66 million tonnes grading 1.02% Cu, 0.77 g/t Au and 2.59 g/t Ag. This estimate did not incorporate some of the significant deep drilling results obtained from the C-zone, which lies vertically below the current resource. Underground block caving with some sublevel caving is proposed. Following completion of a feasibility study in early 2007, the company plans to quickly advance the project towards a production decision to construct an underground mine, perhaps as early as 2009.

International Bethlehem Mining Corp is evaluating the viability of reprocessing the zinc and copper contained in the mill tailings pond on its dormant **Goldstream** property, north of Revelstoke. Metallurgical studies have recently been completed and results are expected in 2007.

Southeast – Major Development Projects

Roca Mines Inc's **MAX** porphyry molybdenum project, southeast of Revelstoke, has been in the construction phase throughout 2006, after receiving its Mine Permit in late 2005. The company expects to commence production in 2007. Initial underground mining will target a high-grade measured and indicated resource of 280 000 tonnes grading 1.95% MoS_2. It plans an initial annual production of 72 000 tonnes, which could be doubled with the assembly of a second mill circuit.

Cline Mining Corp entered the Environmental Assessment Process with its **Lodgepole** coal project, located 30 kilometres southeast of Fernie. Cline continued baseline environmental monitoring in 2006.

Southwest - Major Development Projects

In recent years, the most significant industrial minerals trend in British Columbia has been an increasing export of crushed stone and natural aggregate to urban centres along the west coast of the United States and higher sales within British Columbia's Lower Mainland. These markets continue to be very competitive as industry identifies new potential for development. A good example of this is Polaris Minerals Corp's Orca project near Port McNeil on

Photo 5. Looking northeasterly over the millsite construction area towards Trout Lake, MAX project (photo by T. Schroeter).

northern Vancouver Island. The recently permitted **Orca** sand and gravel project is scheduled to commence production by the end of 2006. First year sales are estimated at 1.4 million tonnes; the company hopes to eventually ramp production up to over 6 million tonnes annually. The focus is on the California market. Polaris is also permitted for the **Eagle Rock** quarry, a construction aggregate complex and ship-loading facility near Port Alberni. The project has a large resource of granite (690 Mt); however, a feasibility study is on hold as the company's focus has shifted to its Orca quarry.

MINERAL EXPLORATION

There were approximately 240 exploration projects in British Columbia with budgets in excess of $100 000 (selected projects listed in Table 3 and shown in Figure 7), up 20% from 2005. This includes 72 projects with expenditures in excess of $1 million, up 67% from 2005, and representing approximately 78% of total expenditures.

The total metres drilled rose significantly, with about 240 projects aggregating approximately 830 000 metres, up 26% from 2005. Approximately 82% of exploration spending was on advanced projects, while 14% and 4% was on grassroots and minesite programs, respectively (Figure 8). Porphyries and related targets account for half of the total (Figure 9), including approximately 10% for molybdenum porphyries (42 projects).

An estimated 620 exploration projects were carried out during 2006, with seasonal jobs directly related to these projects totaling approximately 4550. In addition, more that 600 full-time mineral exploration jobs are based out of major urban centres in B.C.

Many companies were unable to complete programs during 2006 due to a shortage of drills, drillers, field crews and/or helicopters. As well, delays in receiving analytical results were common. As a result, some programs were not completed before the onset of severe

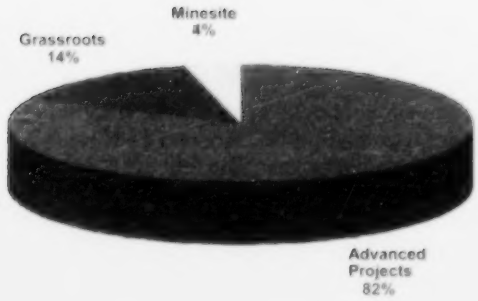

Figure 8. Exploration expenditures by type of program – 2006.

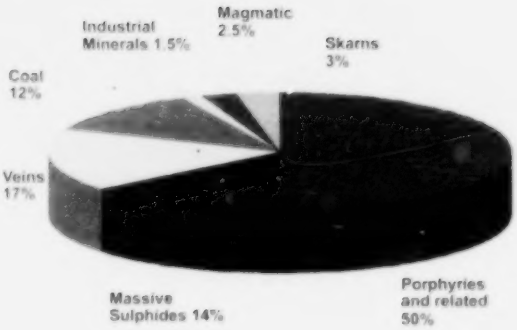

Figure 9. Percentage of project expenditures, focused on specific deposit types in 2006.

winter weather either slowed or shut them down.

Provincial exploration expenditures for coal decreased by 20% to about $32 million in 2006, as lower coal prices reduced the number of projects. Twenty-four drilling projects with an aggregate of approximately 122 000 metres were completed. Exploration expenditures on industrial minerals projects are estimated at $3.5 million.

At least 30 new mineral discoveries were reported in 2006 throughout the province (Figure 10). They are porphyry, polymetallic massive sulphide, vein or skarn prospects.

Northwest - Major Exploration Projects

In the northwest corner of the province near the historic Atlin placer gold camp, Prize Mining Corp commenced a bulk sampling program on its **Yellowjacket** gold property.

Across the Tulsequah River west of the Tulsequah Chief deposit, Canarc Resource Corp completed 24 000 m its **New Polaris** gold property. The C vein has been traced to 350 m below surface, and several high-grade and bulk of in-fill drilling at 30-m centres on the C vein system of mineable intersections were reported. Underground

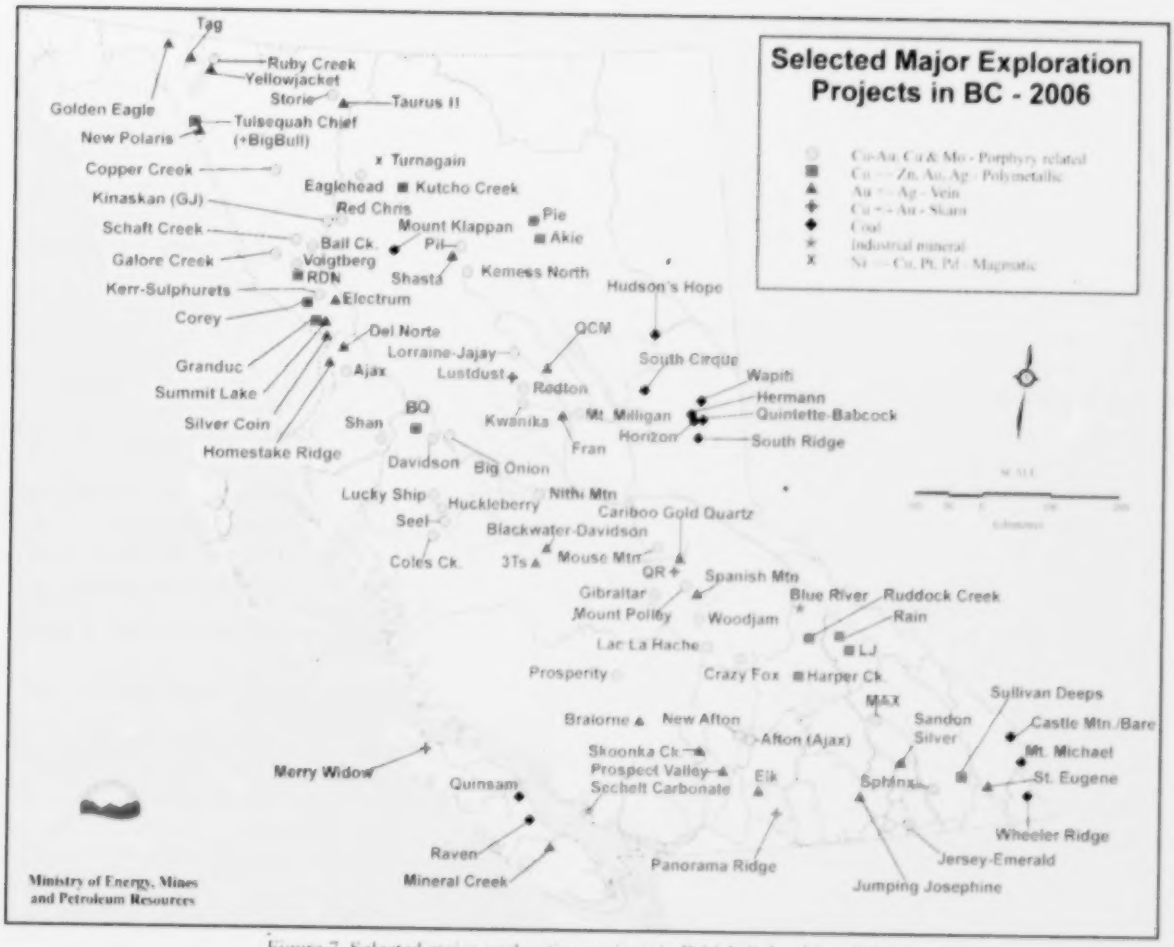

Figure 7. Selected major exploration projects in British Columbia – 2006.

drilling will commence early in 2007.

Near Cassiar, Cusac Gold Mines Ltd discovered new gold mineralization in the Oro vein on its **Taurus II** property, which adjoins the Taurus bulk-mineable project on the south. Columbia Yukon Resources Inc completed 5000 metres of drilling on its **Storie** molybdenum prospect, as a first step toward verifying results of historic work conducted by Shell Canada Resources in the 1980s.

Northwest of Dease Lake, Hard Creek Nickel Corporation completed over 19 000 m of drilling on its bulk-tonnage **Turnagain** nickel deposit. The company hoped to increase the measured and indicated resource of 105.7 million tonnes grading 0.21% Ni contained in sulphides, as well as evaluating the platinum and palladium content of the serpentinized ultramafic body. West of Iskut, the Donnelly North zone was discovered by Canadian Gold Hunter Corp on its **Kinaskan (GJ)** copper-gold property, as part of its 18 230-m drilling campaign. It also delineated shallow high-grade mineralization in the Donnelly zone.

Copper Fox Metals Inc continued drilling to confirm grades and to collect samples for metallurgical testing on its **Schaft Creek** porphyry copper-molybdenum-gold-silver porphyry deposit, located 50 km south of Telegraph Creek. Historic measured and indicated resources are estimated at 629 million tonnes grading 0.35% Cu, 0.026% Mo and 0.21 g/t Au, at a 0.3% Cu- equivalent cut-off. The company entered the project into the Environmental Assessment Process.

Seabridge Gold Inc completed 9100 metres of drilling on the Sulphurets Gold and Mitchell zones on its **Kerr-Sulphurets** bulk-tonnage, copper-gold-molybdenum property, 40 km north of Stewart, for which there are previous resource estimates. Immediately to the east, Silver Standard Resources Inc reactivated exploration on its **Snowfield** gold - molybdenum project. Drilling in 2006 identified a higher-grade core within newly reported measured 4 707 000 tonnes grading 2.2 g/t Au and 0.009% Mo and indicated 15 373 000 tonnes grading 2.09 g/t Au and 0.014% Mo, as well as inferred 5.5 million tonnes grading 1.96 g/t Au and 0.012% Mo, at a 1.5 g/t Au cut-off grade.

TABLE 3. SELECTED MAJOR EXPLORATION PROJECTS IN BRITISH COLUMBIA IN 2006

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
3Ts	Silver Quest Resources Ltd	093F 055, 068	Au-Ag	Epithermal vein	G; DD (~4000 m)	C
Afton Area (West Ajax, East Ajax, DM, Audra)	Abacus Mining and Exploration Corp	92INE012, 013, 030	Cu, Au, Ag, Pd	Alkalic Porphyry	DD (~35 000 m)	SC
Ajax	Tenajon Resources Corp	103P 223	Mo	Porphyry	DD (~3400 m, 6 holes)	NW
Ajax	New Gold Inc	92INE012, 013	Cu, Au	Alkalic Porphyry	DD (~2500 m)	SC
Akie	Mantle Resources Inc	094F 031	Zn-Pb-Ag	Sedex	G; GC; DD (4881 m, 11 holes)	C
Albert's Hump (Ranch)	Guardsmen Resources Inc	094E 079	Au	Epithermal Vein	G; GC; DD (645 m, 7 holes)	C
Axe	Westar Resources Corp / Bearclaw Capital Corp	92HNE143, 040, 142	Cu, Au, Ag	Alkalic Porphyry	DD (1700 m, 5 holes)	SC
Bull Creek	Paget Resources Corp	104G 018, 042	Cu, Au	Porphyry	Geol; DD (~900 m, 4 holes)	NW
Barbara	Mountain Boy Minerals Ltd		Ag, Pb, Zn	VMS	DD (1183 m, 14 holes)	NW
Barnes Creek	Columbia Yukon Explorations Inc	82L/01W	Au, Ag	Epithermal Vein	DD (~800 m); TR (~1200 m)	SC
Beale Lake	Sutcliffe Resources Inc	104I 098	Au	Intrusion-related	DD (1928 m, 10 holes)	NW
Belcourt-Saxon	Peace River Coal Partnership	093I 014, 016	Coking Coal	Sedimentary	G; GP; RD (430 m); CQ; PF; FS	NE
Big Nic / Emory Creek	Pacific Coast Nickel Corp	(92H/11W)	Ni-Cu-PGE	Magmatic	G; MG (2.4 km); AB (74.4 km)	SW
Big Onion	Eagle Peak Resources Ltd	93L 124	Cu, Mo, Au	Porphyry	DD (2700 m, 11 holes)	NW
Blackdome Mine	J-Pacific Gold Inc	92O 053	Au, Ag	Epithermal Vein	DD (~4000 m)	SC
Blackwater-Davidson	Silver Quest Resources Ltd	093F 037	Au-Ag	Epithermal Vein	DD (353 m)	C
Blue River (Upper Fir, Fir and Verity)	Commerce Resources Corp	83D 005, 035	Ta, Nb, Phosphate	Carbonatite	DD (3400 m, 17 holes); EN; FS; G; MS; PF	SC
BQ	Endurance Gold Corp	None	Au	Epithermal	G; IP; DD (2017 m, 11 holes)	NW
Bralorne (New Vein - Noellton Vein, Shaft, Maud, Pioneer)	Bralorne Gold Mines Ltd	92JNE001	Au, Ag	Mesothermal Vein	DD (10 278 m); FS	SC
Bronson Slope	Skyline Gold Corp	104B 077	Au, Cu	Porphyry	DD (700 m, 4 holes)	NW
Burnt River (Dillon & Blind)	Western Canadian Coal Corp	093P 007, 008	PCI Coal	Sedimentary	RD (1510) m; GP; CQ; PF; FS	NE
Cariboo Gold Quartz (incl. Bonanza Ledge, Mucho Oro)	International Wayside Gold Mines Ltd	093H 019	Au	Replacement, Mesothermal Vein	A; G; TR; DD (~4500 m); GT; PF; EN	C
Carmi	Hi Ho Silver Resources Ltd	082ENW036	Mo	Porphyry	IP; DD (2000 m)	SE
Castle Mountain/Bare Mountain	Elk Valley Coal Corporation	082JSE006, 008	coal	Sedimentary	A; RC (23 871 m, 66 holes)	SE
Chappelle (Baker mine area)	Sable Resources Ltd	094E 026	Au-Ag	Epithermal Vein	DD (1372 m, 8 holes)	C
Chu	TTM Resources Ltd	093F 001	Mo	Calc-Alkalic Porphyry	A; G; GC; DD (est. 600 m)	C
Clone	Canasia Industries Corp	103P 251	Au	Shear Vein	AB-EM; DD (988 m, 7 holes)	NW
Coal Creek	West Hawk Development Corp	93L 147	Thermal coal	Coal	RC (1474 m, 15 holes)	NW

TABLE 3. CONTINUED

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
Coles Creek	Callinan Mines Ltd	93E 042	Cu, Mo	Porphyry	GC; IP; DD (4495 m, 8 holes)	NW
Congress (Lou, Howard, Golden Ledge)	Levon Resources Ltd	92JNE029, 131, 132	Au, Ag, Cu, Sb	Mesothermal Vein	DD (~2000 m)	SC
Copper Ace South	Copper Ridge Explorations Inc	093B 061, 062	Cu-Mo	Calc-Alkalic Porphyry	G; DD (801 m, 3 holes)	C
Copper Creek	Firesteel Resources Inc	104J 035	Cu, Au	Porphyry	TR (1700 m)	NW
Corey	Kenrich Eskay Mining Corp	104B 011, 355	Au, Ag	Epithermal VMS	DD (12 914 m, 54 holes)	NW
Coyote Creek	Eagle Plains Resources Ltd./CGC Inc	82FNW071, 077, 078	Gypsum	Evaporite	DD (1614 m, 3 holes)	SE
Crazy Fox	Newmac Resources Inc	092P 014, 015, 016	Mo, W	Porphyry	DD (7490 m, 33 holes); TR (~1200 m)	SC
Crowsnest	La Quinta Resources Corporation	082GSE070	Au	Intrusion-related	A; TR	SE
Davidson (Yorke-Hardy)	Blue Pearl Mining	93L 110	Mo	Porphyry	EN; UG (50 m); DD (7568 m, 30 holes)	NW
Del Norte	Sabina Resources Limited	104A 176, 161	Au, Ag	Epithermal Vein	DD (~2000 m, 12 holes)	NW
Dobbin	Molycor Gold Corp / Goldrea Resources Corp	82LSW005	Cu, Pt, Pd	Magmatic; porphyry?	DD (1750 m)	SC
Double Ed (Coastal)	Kenrich Eskay Mining Corp	103P 025	Cu, Zn	VMS	AB-EM; DD (13 000 m, 51 holes)	NW
Eaglehead	Carmax Explorations Ltd	104I 008	Cu, Au	Porphyry	DD (3076 m, 10 holes)	NW
Electrum	American Creek Resources Ltd	104B 033	Au, Ag	Vein	TR; DD (2797 m, 21 holes)	NW
Elk (Siwash North)	Almaden Minerals Ltd	92HNE096	Au, Ag	Mesothermal Vein	DD (8874 m, 45 holes); TR (300 m); GC; EN; PF	SC
Empire	American Creek Resources Ltd	92INE082, 086, 088, 161	Au, Ag	Vein, Porphyry	AB-MG; AB-RD (1070 km); P; GP; G	SC
Endako	Blue Pearl Mining Ltd	93K 006	Mo	Porphyry	DD (5941 m, 35 holes)	NW
Fireweed	Argentor Resources	93M 151	Ag, Pb, Zn	Manto, Replacement	DD (937 m, 5 holes)	NW
Fox 1-21 (Deception)	Happy Creek Minerals Ltd	none	W, Mo, Zn, Au	Skarn	GC; G; TR (~1650 m)	SC
FR	Mountain Boy Minerals	104A 117, 118, 119	Ag	Vein	DD (1500 m)	NW
Fran	Yankee Hat Minerals Ltd	093N 207	Au-Cu	Alkalic Porphyry	A; G; GC; GP; DD (2060 m, 14 holes)	C
Frank Creek, SCR, Ace	Barker Minerals Ltd	093A 142, 143, 153	Cu-Zn-Pb-Au-Ag	VMS; Mesothermal Vein	A; G; GC; TR; DD (2037 m, 5 holes)	C
Galaxy	Discovery - Corp Enterprises Inc	92INE007	Cu, Au	Alkalic Porphyry	G; GC; DD (286 m, 3 holes)	SC
Galore Creek	NovaGold Resources Inc	104G 090	Cu, Au	Skarn, Alkalic Porphyry	DD (~35 000 m, 62 holes); FS	NW
Giant Copper	Imperial Metals Corporation	92HSW001, 2, 27, 161	Cu±Mo±Au	Porphyry	DD (1212 m, 2 holes)	SW
Gibraltar	Taseko Mines Ltd	093B 005-008, 011-013	Cu-Mo	Calc-Alkalic Porphyry	G; GC; DD (~26 000 m)	C
Golden Eagle	Signet Minerals Inc	104M 057, 075, 085	Au	Epithermal Vein; Skarn	DD (945 m, 6 holes)	NW
Goodrich Central-South	First Coal Corporation	093O 034	Coking Coal	Sedimentary	A; G; GP; DD (6500 m); RD (4000); CQ	NE
Granduc	Bell Resources Corp	104B 021	Cu, Ag, Au	VMS	G; DD (3927 m, 12 holes)	NW

TABLE 3. CONTINUED

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
Greenhills Mine (Cougar North)	Elk Valley Coal Corporation	082JSE007	Coal	Sedimentary	RC (5115 m)	SE
Greenwood Gold	Merit Mining Corp	082ESE032, 033, 041, 042	Au, Cu	Mesothermal Vein/polymetallic Vein	TR; PF	SE
Harper Creek	Yellowhead Mining Inc	82M 009	Cu, Ag, Au, Zn, Mo	Stratiform Disseminated	DD (5000 m); GP-IP (45 km); GC; G	SC
Hen	Swift Resources Inc	093A 048	Au	Mesothermal Vein	G; GC; TR	C
Hepburn Lake	Acrex Ventures Ltd		Au	Mesothermal Vein	A; G; GC; DD (1958 m, 11 holes)	C
Hermann	Western Canadian Coal Corp	093I 031	Coking Coal	Sedimentary	RD (2940 m); DD (1575 m); CQ; EN; PF; FS	NE
Highland Valley Mine	Highland Valley Copper	92ISW012, 045; 92ISE013	Cu, Mo	Porphyry	DD (6482 m, 12 holes)	SC
Homestake Ridge	Bravo Venture Group Inc	103P 216	Au, Ag	Vein	DD (6532 m, 28 holes)	NW
Horizon (Five Cabin)	Hillsborough Resources Ltd		Coking Coal / PCI Coal	Sedimentary	A; G; TR; RD (10 532 m); CQ; EN; PF	NE
Howell	La Quinta Resources Corporation	082GSE037, 048	Au	Intrusion-related	DD (1070 m, 9 holes)	SE
HPH	New Livingstone Minerals Inc	092L 069	Ag, Zn, Pb, Cu, Au, Mag	Skarn/Manto TR	BU (900 t)	SW
Hudson's Hope	Kennecott Canada Exploration Inc		Coking Coal	Sedimentary	G; GP; CQ; RD (470 m)	NE
Iron Lake	Argent Mining Corp. / Eastfield Resources Ltd	92P 132	Cu, Au, Pd, Pt	Magmatic PGE	UT; DD (680 m)	SC
Irony	Jasper Mining Corp	(082M076)	Zn-Pb-Ag	Sedex	DD (400 m); AB-EM; AB-MG (564 km); GC	SC
Isintok Lake	Jasper Mining Corp	82ENW093	Ag, Cu, Mo	Porphyry	DD (~5000 m); IP (16 km); GC	SC
Jake, CLO	Rimfire Minerals Corp	None	Au	Porphyry / Mesothermal Vein	GP-EM; VLF; GC; TR (~1000 m)	SC
Jamieson - Bullion	American Creek Resources Ltd	92INE082, 086, 088	Au	Mesothermal Vein	DD (~1000 m)	SC
Jersey-Emerald	Sultan Minerals Inc	082FSW009, 010, 011, 218	Mo, W	Porphyry (Mo); Skarn (W)	DD (389 m)	SE
JJ	Astral Mining Corp	082E083, 084, 085, 086, 087	Au	Intrusion-related	G; GC; AB-GP; TR	SE
JTM (Misty, Slide)	Teck Cominco Limited	093N 001	Cu-Au	Alkalic Porphyry	G; GC; DD (3070 m)	
Kamloops Gold	Williams Creek Explorations Limited / New Gold Inc	92I 086	Cu, Au	Alkalic Porphyry	DD (4048 m)	SC
Kemess North area	Northgate Minerals Corporation	094E 021	Au-Cu	Calc-alkalic Porphyry	A; G; GC; IP; DD (8632 m, 35 holes); FS	C
Kemess South	Northgate Minerals Corporation	094E 094	Au-Cu	Porphyry	DD (2936 m)	C
Kena (Silver King zone)	Sultan Minerals Inc	82FSW176	Ag, Cu, Au	Polymetallic Veins	DD (496 m)	SE
Kerr-Sulphurets	Seabridge Gold Inc	104B 103, 182	Cu, Au	Porphyry	DD (9129 m, 29 holes)	NW
Ketchan	Copper Belt Resources Ltd	92HNE115, 118	Cu, Au, Ag	Alkalic Porphyry	DD (~2000 m)	SC
Kinaskan (GJ)	Canadian Gold Hunter Corp	104G 034, 086	Cu, Au	Porphyry	G; DD (18 133 m, 62 holes)	NW
Kliyul	Geoinformatics Exploration Inc	094D 023	Cu-Au	Porphyry	G; GC; DD (751 m, 2 holes)	C

TABLE 3. CONTINUED

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
Kutcho Creek	Western Keltic Mines Inc	104I 060	Cu, Zn, Ag, Au	VMS	EN; DD (~2200 m)	NW
Kwanika	Serengeti Resources Inc	093N 018, 073	Cu-Au	Alkalic Porphyry	G, GC, IP; DD (1889 m, 10 holes)	C
Lac La Hache (Aunzon, Peach lake, Peach Melba, Ann North, Spout Lake, North and South Zones)	GWR Resources Inc	092P 001, 002, 034, 035, 108, 120, 153	Cu-Au	Porphyry/Skarn	TR; DD (~6000 m)	SC
Lang Bay	Electra Gold Ltd	092F 137	Kaolinite, clay	IM	DD (457 m, 6 holes)	SW
Lawyers	Bishop Gold Inc	094E 068	Au-Ag	Epithermal vein	G, GC; DD (645 m, 5 holes)	C
Lehigh Texada	Lehigh Northwest Materials Ltd	092F 104	Limestone	IM	A; DD (2000 m, 15 holes)	SW
Line Creek Mine (Horseshoe Ridge)	Elk Valley Coal Corporation	082GNW021	Coal	Sedimentary	RC (2076 m, 15 holes)	SE
LJ	Consolidated Venturex Holdings Ltd	82M 264	Zn, Pb, Cu, Au, Ag	Besshi VMS	G; DD (1542 m, 10 holes)	SC
Lloyd-Nordik	Valley High Ventures Ltd	093A 160	Cu-Au	Alkalic Porphyry	G, GC, IP, MAG; DD (~5600 m, 7 holes)	C
Lorraine-Jajay	Teck Cominco Limited	093N 002, 066, 224	Cu-Au	Alkalic Porphyry	A, G, GC; DD (2606 m)	C
Louise Lake	North American Gem Inc	93L 079	Cu, Au, Mo	Porphyry	DD (3387 m, 12 holes)	NW
Lucky Ship	New Cantech Ventures Inc	093L 053	Mo	Porphyry	DD (~6000 m, 18 holes)	NW
Lustdust	Alpha Gold Corp	093N 009, 008	Au-Ag-Cu-Zn-Pb	Skarn, Manto, Mesothermal Vein	A, G, GC, TR; DD (6287 m), RC (3196 m)	C
Macktush	SYMC Resources Ltd	92F 012	Au-Ag-Cu+Mo	Vein, Porphyry	G, GC; DD (860 m)	SW
Maple Leaf	Saturn Minerals Inc	104K 117	Cu, Zn, Ag, Au	VMS	DD (1346 m, 7 holes)	NW
Merry Widow	Grande Portage Resources Ltd	092L 044	Au-Ag-Cu±Co	Skarn	DD (~4500 m, in progress); AB, IP (8.85 km)	SW
Mess Creek	Puget Resources Corp	104G 040	Cu, Au	Porphyry	DD (~800 m)	NW
Midnight/IXL/OK	West High Yield (W.H.Y.) Resources Ltd	082FSW119, 116, 117	Au	Mesothermal Vein	DD (2725 m, 23 holes)	SE
Mineral Creek	Bitterroot Resources Ltd	092F 079, 331	Au-Ag	Vein	DD (9000 m, 44 holes)	SW
Molybdenum Creek	BCM Resources Corp	103I 016	Mo	Porphyry	DD (~1000 m, 3 holes)	NW
Molygold	TTM Resources Inc	092JW007, 017, 018	Cu-Mo	Porphyry	DD (2000 m); IP, GC	SW
Monroe Lake	St. Eugene Mining Corporation	082GSW035	Pb, Zn, Ag	Polymetallic Vein	AB-GP; DD (624 m, 5 holes)	SE
Mount Klappan	Fortune Minerals Limited	104H 021	Anthracite	Coal	EN, FS	NW
Mount Polley	Imperial Metals Corporation	093A 008, 093A 164	Cu-Au-Ag	Alkalic Porphyry	G, GC, TR; DD (~23 000 m); PF, FS	C
Mouse Mountain	Richfield Ventures Corp	093G 003	Cu-Au	Alkalic Porphyry	G, GC, 3D IP, TR	C
Mt. Michael	Elk Valley Coal Corporation	082GNE022	Coal	Sedimentary	A; RC (9051 m, 33 holes)	SE
Mt. Milligan	Terrane Metals Corp	093N 191, 194	Au-Cu	Alkalic Porphyry	G; DD (~8500 m); MT, FS	C
Murphy Lake	Candorado Operating Co Ltd	93A 044, 073, 113, 063, 92P 004	Cu, Au	Alkalic Porphyry	DD (800 m); IP, AB-RD, AB-MG, GC	SC
Murray River	Kennecott Canada Exploration Inc	-	Coking Coal	Sedimentary	G, GP, CQ, RT (512 m)	NE
Myra Falls mine	Breakwater Resources Ltd	92F 330, 071, 072, 073	Cu-Zn-Au-Ag-Pb	VMS	DD (~5000 m, in progress);	SW

TABLE 3. CONTINUED

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
New Afton	New Gold Inc	92INE023	Cu, Au, Pd, Ag	Alkalic Porphyry	CD; FS; EN; GD; MS; PF; DD (~30 000 m);	SC
New Polaris	Canarc Resource Corp	104K 003	Au	Mesothermal Vein	DD (24 394 m, 69 holes)	NW
Newmac, Bluff	Newmac Resources Inc	92N 030, 054, 055, 021?	Cu, Ag, Au	Porphyry Vein	DD (est. 800 m); IP	SC
Newmont Lake	Romios Gold Resources Inc	104B 281, 282	Au, Cu	Skarn	IP; DD (771 m, 10 holes)	NW
Newton Hill	High Ridge Resources Inc	092O050	Cu, Au	Porphyry	DD (2019 m, 12 holes); TR (3000 m)	SC
Nicomen River	Tanqueray Resources / Almaden Minerals Ltd	(092I014)	Au, Ag	Epithermal vein	GC; TR (425 m)	SC
Nithi Mountain	Leeward Capital Corp	093F 006-016	Mo	Calc-Alkalic Porphyry	A; G; GC; DD (3275 m, 16 holes)	C
OK	Goldrush Resources Ltd	92K 008, 057, 155	Cu-Mo	Porphyry	A; GC	SW
Oscar (Oxide)	Dajin Resources Corp	082FSW022	Zn, Pb	Oxide	A	SE
Panorama Ridge	Goldcliff Resource Corp	82ESW052, 259	Au	Skarn	DD (2213 m); TR (1450 m);	SC
Pat (Giscome)	Graymont Western Canada Ltd	093J 025	Limestone	Sedimentary	A; G; GC; DD (~2400 m)	C
Peak	Grizzly Diamonds Ltd	93M 015	Au, Ag	Vein	AB-EM; DD (1445 m, 7 holes)	NW
Pearson (Reko, Bugaboo)	Emerald Fields Resource Corp	082C 022	PGE, Ni, Cu	Mag, Skarn	AB-MG (1970 km)	SW
Pie	Ecstall Mining Corp	094F 023	Zn-Pb-Ag	Sedimentary-Exhalative	G; GC; DD (4263 m, 14 holes)	NE
Pil North	Finlay Minerals Ltd	094E 029, 083, 213, 216	Au-Cu	Porphyry	A; G; GC; TR; DD (1945 m, 12 holes)	C
Poly	Lateegra Resources Corp	104A 026, 128	Au	Shear Vein	DD (~700 m)	NW
Porcher Island	Cross Lake Minerals Ltd	103J 017	Au	Vein	DD (est. 1500 m)	NW
Princeton	Anglo Canadian Uranium Corp	092HSE033	Cu, Au, Pd, Ag	Porphyry	DD (~1500 m, 12 holes)	SC
Prospect Valley	Consolidated Spire Ventures Ltd	92ISW105(?)	Au, Ag	Epithermal Vein	GP (48 km); DD (3734 m, 20 holes)	SC
Prospect Valley (NIC)	Consolidated Spire Ventures Ltd / Almaden Minerals Ltd	none	Au, Ag	Epithermal Vein	GP; DD (1500 m, 5 holes)	SC
Prosperity	Taseko Mines Ltd	92O 041	Cu, Mo, Au	Porphyry	FS; EN;	SC
Purcell Block	Ruby Red Resources	082FSE116	Au	Sedex	G; GC; A; TR	SE
QCM	Canadian Gold Hunter Corp	093N 200	Au	Mesothermal Vein	IP; EM; MG; DD (1529 m, 10 holes)	C
QR	Cross Lake Minerals Ltd	093A 121	Au	Skarn	A; UG; G;	C
Quinsam Coal mine	Quinsam Coal Corp (Hillsborough Resources Ltd)	092F 319	Thermal coal	Sedimentary	RD (800 m)	SW
Quintette-Babcock Window	Elk Valley Coal Partnership	093I 011	Coking Coal	Sedimentary	A; G; GP; RC (3262 m); RD (2559 m); CQ	NE
Rain (Sorcerer)	International Bethlehem Mining Corp	82M 156	Cu, Mo, W	Skarn	AB-EM; AB-MG (590 km); DD (800 m, 4 holes)	SC
Rateria	Happy Creek Minerals Ltd	92ISE092, 150, 060	Cu, Mo	Calc-alkalic Porphyry	DD (~3000 m, 6 holes)	SC
Raven	Compliance Energy Corp	092F 333	Metallurgical coal	Sedimentary	GP (21 km seismic); RD+DD (2850 m, 12 holes); BU (12 t)	SW
RDN	Northgate Minerals Corp	104G 144	Au, Ag, Pb, Zn	VMS	AB-EM; DD (1350 m, 4 holes)	NW

TABLE 3. CONTINUED

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
Red Bird	Torch River Resources Ltd	93E 026	Mo	Porphyry	DD (2134 m, 7 holes)	NW
Red Chris	bcMetals Corporation	104H 005	Cu, Au	Porphyry	DD (4676 m, 14 holes)	NW
Red Hill	Avalon Ventures Ltd	92INW042	Cu, Zn, Au, Ag	VMS	DD (1120 m, 4 holes); G; GP	SC
Redton	Geoinformatics Exploration Inc	093N 067, 082, 095	Cu-Au	Alkalic Porphyry	G, GC, GP; DD (4032 m, 12 holes)	C
Reesor	Anglo Coal Canada Inc	093P 017	Coking Coal	Sedimentary	A, G, GP, RD (1250 m)	NE
Ruby Creek	Adanac Molybdenum Corp	104N 052	Mo	Porphyry	DD (2688 m, 13 holes)	NW
Ruddock Creek	Selkirk Metals Corp / Doublestar Resources Ltd	082M 084	Zn, Pb, Ag	Stratiform	DD (14 551 m, 38 holes); AB-EM, AB-MG, GP, GC	SC
Sandon Silver	Klondike Silver Corp	082FNW043	Ag, Pb, Zn	Polymetallic Veins	GC, AB-GP, MG, GC, TR	SE
Schaft Creek	Copper Fox Metals Inc	104G 015	Cu, Mo, Au	Porphyry	DD (9008 m, 42 holes); EN	NW
Sechelt Carbonate	Pan Pacific Aggregates Ltd	092GNW031	Dolomite and other	Sedimentary	DD (9000 m); AB-EM (740 000 m); G ; GC	SW
Seel	Gold Reach Resources Ltd	93E 105	Cu, Au	Porphyry	DD (6046 m, 25 holes)	NW
Seneca	Carat Exploration Inc	092HSW013	Zn-Cu-Pb-Ag-Au	VMS	DD (~3000 m, in progress); G, GC, AB (1 080 000 m)	SW
Shan	BCM Resources Corp	103I 114	Mo	Porphyry	DD (3550 m, 20 holes)	NW
Shasta	Sable Resources Ltd	094E 050	Au-Ag	Epithermal Vein	DD (1511 m, 20 holes)	C
Silver Coin	Pinnacle Mines Ltd	104B 095	Au, Ag, Pb, Zn	Vein	DD (24 206 m, 115 holes)	NW
Skoonka (JJ, Discovery)	Strongbow Exploration Inc / Almaden Minerals Ltd	92ISW104, 105	Au, Ag	Epithermal Vein	DD (4500 m); AB-GP, GP, GC, G, TR	SC
Snip North	Newcastle Minerals Ltd	104B 089	Au, Cu	Porphyry	DD (1095 m, 5 holes)	NW
Snowfield	Silver Standard Resources Inc	104B 179	Au	Porphyry	DD (6141 m, 26 holes)	NW
South Cirque	First Coal Corporation	093O 034	Coking Coal	Sedimentary	A, G, GP; DD (4500 m); CQ	NE
South Ridge	Anglo Coal Canada Inc		Coking Coal	Sedimentary	A, G, GP; RD (9900 m); DD; CQ	NE
Spanish Mountain	Skygold Ventures Ltd / Wildrose Resources Ltd	093A 043	Au	Mesothermal Vein	A, G, GC; AB-EM, MAG, RC (5040 m); DD (21 846 m)	C
Spences Bridge (Mag/LP Silk, Southern Belle, Inn, Shovelnose)	Strongbow Exploration Inc	092I	Au, Ag	Epithermal Vein	GC, G, Prosp	SC
Sphinx	Eagle Plains Resources Ltd	082FNE004, 094, 095	Mo, W	Porphyry	DD (1700 m, 3 holes)	SE
St. Eugene	St. Eugene Mining Corporation	82GSW023, 025, 030	Pb, Zn, Ag	Polymetallic Vein	AB-GP; DD (1421 m, 4 holes)	SE
Stirrup	Anglo-Canadian Uranium Corp	(092O054)	Au	Epithermal Vein	DD (~3000 m, 10 holes)	SC
Storie	Columbia Yukon Explorations Inc	104P 069	Mo	Porphyry	DD (~5000 m, 20 holes)	NW
Strebbe	S. Strebchuk, Galena Construction	082FNW255	Au	Skarn	A; UG (110 m)	SE
Sukunka	Canadian Dehua International Mines Group Inc	093P 011	Coking Coal	Sedimentary	G, RT (460 m, 2 holes)	NE
Sullivan Deeps	Stikine Gold Corporation	082G 09E	Zn, Pb, Ag	Sedex	A; DD (2400 m)	SE
Summit Lake	Tenajon Resources Corp	104B 034	Au	Intrusion-related vein	UG (110 m); DD 3650 m, 26 holes)	NW
Table	First Coal Corporation		Coking Coal	Sedimentary	G, GP; DD (1500 m); CQ	NE

TABLE 3. CONTINUED

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program	Region
Tag	CZM Capital Corp	104M 079, 080	Au, Ag	Epithermal Vein	DD (3108 m, 23 holes)	NW
Taurus II	Cusac Gold Mines Ltd	104P 016, 077	Au	Orogenic gold	G, GC, TR; DD (3300 m, 21 holes)	NW
Tchentlo	Serengeti Resources Inc		Cu-Au	Alkalic Porphyry	G, IP, DD (213 m, 3 holes)	C
Tentfire Prospect	Anglo Coal Canada Inc		Coking Coal	Sedimentary	G, GP, RT (1200 m), CQ	NE
Thomlinson Creek	Dentonia Resources Ltd	93M 122	Mo	Porphyry	DD (837 m, 3 holes)	NW
Todd Creek	Goldeye Exploration Ltd	104A 001	Cu, Au	Vein	DD (1331 m, 8 holes)	NW
Tonga	Teuton Resources Corp	103P 156	Ag, Au	Vein	AB-EM, DD (1372 m, 7 holes)	NW
Trend (Roman)	NEMI Northern Energy & Mining Inc	093I 030	Coking Coal	Sedimentary	A, G, GP, TR; DD (1237 m); RD (4993 m); CQ, EN, PF, R	NE
Trident (Missy)	Action Minerals Inc / Aries Resource Corp	094K 005, 006, 008, 010, 011, 013, 018, 037, 043, 049, 056, 070, 073, 088	Copper	Mesothermal Vein	G, GC, DD (~2000 m)	NE
Tulox (Joe)	Amarc Resources Ltd	(092P026)	Au	Vein?	GC, IP (36.5 km)	SC
Tulsequah Chief (•Big Bull)	Redfern Resources Ltd	104K 001, 002•	Cu, Zn, Ag, Au	VMS	DD (~24 000 m, 67 holes), FS	NW
Turnagain	Hard Creek Nickel Corp	104I 051, 119, 120	Ni, Pd, Pt	Magmatic	DD (19 122 m, 68 holes)	NW
Vogtberg	BC Gold Corp	104G 146	Au	Intrusion-related	G, DD (717 m, 4 holes)	NW
Wapiti	Hillsborough Resources Ltd	093P 021	Thermal Coal	Sedimentary	A, G, RD (1622 m), TR, CT, EN, PF	NE
Wasi Creek	Selkirk Metals	094C 024	Zn-Pb-Ag	Mississippi-Valley Type	A, G, GC, DD (~1000 m)	C
Waterfall	Hillsborough Resources Ltd		Coking Coal / PCI Coal	Sedimentary	A, G, TR, RD (4860 m), CQ	NE
Westport	Williams Creek Explorations Ltd		Au	Mesothermal Vein	A, G, GC, DD (~2000 m, 10 holes)	C
Wheeler Ridge	Elk Valley Coal Corporation	093H 027, 034; 082GNE006	Coal	Sedimentary	A, RC (5869 m)	SE
Williams Gold	Arcus Development Group Inc	94E 028	Cu, Mo, Au	Porphyry	DD (864 m, 5 holes)	NW
Wolverine (Perry Creek)	Western Canadian Coal Corp	093P 015, 025	Coking Coal	Sedimentary	RD (4860 m), GP, GT, CD	NE
Woodjam	Fjordland Exploration Inc / Wildrose Resources Ltd	093A 078, 124	Au-Cu	Calc-Alkalic Porphyry	A, G, GC, DD (8172 m)	C
Yellowjacket	Prize Mining Corp	104N 043	Au	Orogenic gold	DD (750 m, 10 holes)	NW
Yuen	Ecstall Mining Corp	094F 013	Zn-Pb-Ag	Sedimentary-Exhalative	G, DD (847 m, 2 holes)	NE

A = access, trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching; UG (X m) = X metres of underground development; UG-BU = underground bulk sample; OP-BU = open-pit bulk sample; UT = UTEM; VLF; WT = washability test (coal)

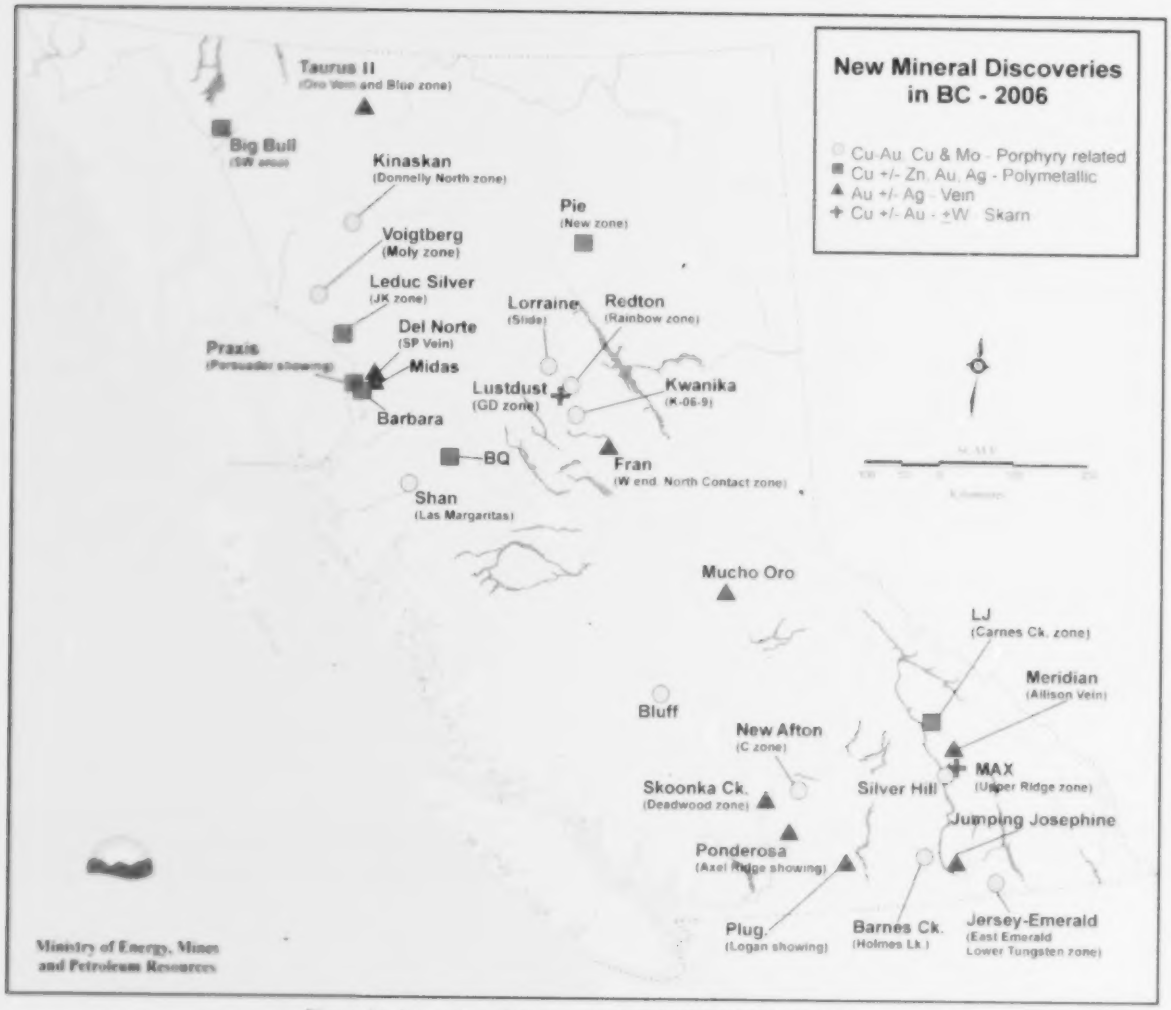

Figure 10. New mineral discoveries in British Columbia in 2006.

North of Stewart, Bell Resources Corp continued to drill the southern extension of the **Granduc** deposit. The JK magnetite iron formation zone was discovered by prospecting, north of Granduc. Tenajon Resources Corp completed underground drilling at its dormant **Summit Lake** gold mine, as well as surface drilling at its adjacent Blueberry vein target. At Summit Lake, highlights included a 1.86-metre interval grading 11.38 g/t Au from the M zone, and a 2.13-metre interval grading 9.26 g/t Au from its newly discovered R zone. Nearby at the **Electrum** (East Gold) gold-silver property of American Creek Resources Ltd, two drilling campaigns tested an extensive alteration zone containing quartz-sulphide veins with significant precious and base metals. Pinnacle Mines Ltd and Mountain Boy Minerals Ltd completed 24 000 m of drilling on their **Silver Coin** precious and base metal property, which adjoins the historic Silbak-Premier mine on the west side. The property includes Tenajon Resources' Kansas claim.

East of Stewart, Sabina Silver Corp drilled the K-LG and newly discovered SP gold-silver veins on its **Del Norte** property. South of Stewart, Bravo Venture Group Inc completed 6532 metres of drilling on its **Homestake Ridge** gold-silver prospect. Significant gold assays were reported over a 300-m strike length, with the highest grades associated with quartz-chalcopyrite vein and breccia mineralization occurring 250 m below historic open cuts. Tenajon Resources Corp conducted a deep drilling program on its **Ajax** molybdenum prospect and extended mineralization 300 m below the level of historic drilling. Samples were collected for metallurgical testing, and the company is studying a possible road connection from Alice Arm. Kenrich-Eskay Mining Corp drilled 13 000 metres on the Double Ed deposit on its **Coastal Copper** property in the Anyox district. It also tested anomalies north of the Hidden Creek and Redwing deposits.

Photo 6. Looking westerly over the Homestake Ridge copper-gold project (photo by P. Wojdak).

BCM Resources Ltd intersected 0.118% Mo over 59.65 metres in its first drillhole on the **Shan** porphyry property, located 20 kilometres east of Terrace. An expanded drill program totaling 20 holes was completed late in the year.

Just east of Smithers, Eagle Peak Resources twinned a number of holes on its **Big Onion** copper porphyry property. The company plans to complete a NI 43-101 resource calculation of resources in 2007. Just west of Smithers, North American Gem Inc continued to drill its **Louise Lake** copper-gold-molybdenum porphyry deposit.

New Cantech Ventures Inc completed a 5600-metre, infill drilling program on its **Lucky Ship** porphyry molybdenum property, which is located 65 kilometres southwest of Houston. Indicated resources were estimated at 29 million tonnes grading 0.09% Mo, at a cut-ff grade of 0.06% Mo. Late in 2006, New Cantech announced an agreement with Palm Clean Energy Inc of Korea which will finance part of the on-going exploration and production-based programs.

Gold Reach Resources Ltd completed additional drilling on its **Seel** porphyry copper-molybdenum-gold project, located 7 kilometres south of the Huckleberry mine. One hole intersected 138 metres grading 0.845% Cu and 23 g/t Ag. Torch River Resources Ltd drilled its **Red Bird** porphyry molybdenum-copper property, 125 kilometres south of Houston. An inferred resource of 75 million tonnes grading 0.065% Mo was calculated from historic drilling.

Northeast - Major Exploration Projects

Coal exploration spending on Peace River coalfields on 17 projects totalled approximately $20 million and included approximately 66 000 metres of drilling. The deposits lie within a 400-kilometre northwest trending belt extending from the Alberta-British Columbia border past Hudson's Hope. Much of the coal in this belt can be used in the steel industry as either a coking coal or for pulverized coal injection. The primary markets for these coals are international and particularly in Asia.

In 2006, Anglo Coal Canada Inc agreed to join a consortium of northeastern coal producers known as the Peace River Coal Limited Partnership, comprising Anglo Coal Canada Inc, Hillsborough Resources Ltd and NEMI. The Partnership is planning to raise its annual production to around 5 million tonnes within 5 years, compared with 240 000 tonnes during 2005.

Major exploration programs, most including drilling, were completed on the following projects: **Belcourt Saxon** (Peace River Coal Inc), **Goodrich-Central South** (First Coal Corp), **Horizon** (Peace River Coal Inc), and **Hudson's Hope** (Kennecott Canada Exploration Ltd). Other significant exploration programs included: **Quintette-Babcock Mountain** (Elk Valley Coal Corp), **Trend-Roman Mountain** (NEMI), **Wolverine-Perry Creek** (Western Canadian Coal Corp), **Reesor** (Hillsborough Resources Ltd), **South Cirque** (First Coal Corp), **South Ridge** (Hillsborough Resources Ltd) and **Table** (First Coal Corp).

In the Gataga sedex belt north of Prince George, Mantle Resources Inc drilled its **Akie** zinc-lead-silver deposit, focusing on the Cardiac Creek zone. The mineralized horizon is up to 30 metres thick. Hole A-06-39A intersected 18.1 metres grading 8.16% Zn, 1.58% Pb and 13.9 g/t Ag. Ten kilometres along trend to the northwest, Ecstall Mining Corp identified a new sedex system on its **Pie** property, and tested its **Yuen** property which is located farther to the northwest.

Aries Resource Corp began drilling on its **Trident** high-grade vein-copper property, near the historic, past-producing Magnum-Churchill mine, 145 kilometres southwest of Fort Nelson. It plans to test numerous Iron Oxide-Copper Gold targets.

Central - Major Exploration Projects

Exploration projects in the Toodoggone included: **Pil North** (Finlay Minerals Ltd), **Brenda** (Canasil Resources Ltd), **Sofia**, **Regal**, **Mac**, **FogMess** and **Louis** (Stealth Minerals Ltd), **Pine** (Cascadero Copper Corp), **Lawyers** (Bishop Gold Inc), **Al** [Ranch] (Guardsmen Resources Ltd), and **Porphyry Pearl** (Starfire Minerals Inc).

Teck Cominco Limited carried out property-wide exploration, including drilling, on the large **Lorraine-Jajay** and **JTM** (Tam and Misty) copper-gold porphyry properties, northwest of Fort St James. Near the Slide showing, drillhole JTM-06-07 assayed 0.72% Cu and 0.07 g/t Au over a 55.5-metre interval. A major drill program is planned for 2007. Alpha Gold Corp drilled its auriferous Canyon Creek copper-skarn zone on its **Lustdust** property, northwest of Fort St James. Drillhole LD06-18 assayed 1.98 g/t Au, 46.9 g/t Ag and 2.17% Cu over a 13.8-metre interval.

Photo 7. Looking northwesterly over the Slide prospect, Lorraine copper-gold project (photo by T. Schroeter).

Serengeti Resources Inc identified a new porphyry copper-gold-molybdenum occurrence with drillhole K-06-09 on its **Kwanika** property, southeast of the Lustdust property. The company reported a 131-metre mineralized interval (visual), which included an upper 33-metre interval containing native copper within a hematitic breccia, a middle 3-metre section containing supergene chalcocite and a lower 89-metre interval comprising hypogene chalcopyrite, pyrite, bornite and molybdenite within a strongly altered monzonite. A 111.13 metre interval assayed 0.69% Cu and 0.54 g/t Au, including a high-grade zone averaging 1.49% Cu and 1.9 g/t Au over 22.5 metres. This discovery precipitated a large, in-fill staking rush between the Kwanika and Lorraine-Jayjay properties to the north.

Geoinformatics Exploration Inc completed a drill program on its large **Redton** porphyry copper-gold property, farther to the east. A 167-metre intersection

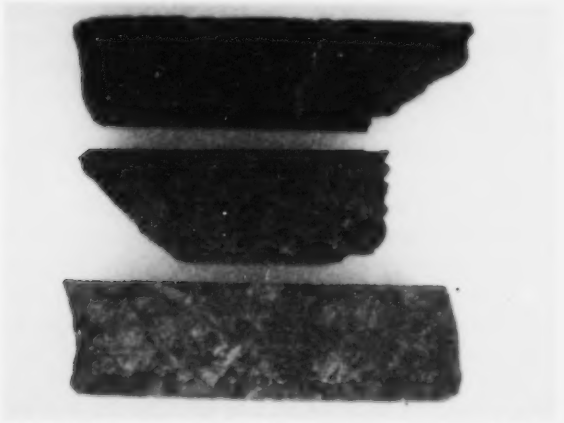

Photo 8. Hypogene copper-gold mineralization in core, drillhole K-06-09, Kwanika project. Top: Hematitic breccia with native copper fracture infillings. Middle: Quartz-sulphide (cpy-py)-tourmaline breccia. Bottom: Quartz-sulphide (cpy-py) stockwork in highly altered monzonite (photo courtesy of Serengeti Resources).

grading 0.319% Cu was reported from the Red showing. Late in 2006, Amarc Resources Inc optioned the **Diver Lake (Bodine)** volcanogenic massive sulphide property from Lorne Warren, a Smithers' prospector. The company then staked more than a 100-kilometre strike length of Sitlika Assemblage rocks, east of Takla Lake.

Northeast of Fort St. James, Terrane Metals Corp, new owner of the **Mt. Milligan** copper-gold porphyry deposit, conducted drilling on the WBX and DWBX zones to upgrade the resource classifications. Measured and indicated resources total 206 million tonnes grading 0.247% Cu and 0.6 g/t Au. The project re-entered the Environmental Assessment Process in 2006, and a feasibility study will be released later in 2007.

Yankee Hat Minerals Ltd completed a major drilling and trenching program on the North Contact gold zone on its **Fran** porphyry-related property. Drillhole FR-59 intersected 4.85 metres grading 10.96 g/t Au, 40.15 g/t Ag and 1.48% Cu within a 54.6-metre interval grading 1.18 g/t Au.

Just southeast of the Endako mine, Leeward Capital Corp completed a large drilling program on its **Nithi Mountain** molybdenum deposit. A resource calculation is being prepared.

South of Vanderhoof, Silver Quest Resources Ltd explored several epithermal gold-silver prospects, including **Blackwater-Davidson** and **3Ts**. At 3Ts, previous resources were calculated for the Upper Tommy and Upper Ted epithermal veins. The company plans to release a resource estimate for the Lower Ted vein.

Skygold Ventures Ltd (70%) and Wildrose Resources Ltd (30%) continued drilling (~26 000 metres) on their sediment-hosted **Spanish Mountain** bulk tonnage, gold target near Likely. Mineralization in the favourable argillites and metasiltstones has been traced over 1200 metres and for greater than 450 metres across its axis in the Central Main zone. Significant results have been reported (*e.g.* 94.5 metres grading 1.81 g/t Au, including 22.9 metres grading 5.04 g/t Au). The company plans to complete a resource estimation in 2007 for this zone. A limited amount of drilling was completed on other zones with encouraging results.

South of the Mount Polley mine, Fjordland Exploration Ltd (under a joint venture agreement with Wildrose Resources Ltd) continued to drill potentially significant gold-copper mineralization in the Megabuck and Takom zones on the **Woodjam** property. On the southern extension of the Megabuck zone, drillhole 06-051 intersected 208 metres grading 0.55 g/t Au and 0.12% Cu. Adjoining the Mount Polley mine to the north is Valley High Ventures Ltd's **Lloyd-Nordik** porphyry copper-gold property. Drilling on the Boundary zone targeted the continuation of similar-style mineralization as that in Imperial's Northeast zone. The best intersection during the 2006 program was a 21-metre intersection grading 2.01% Cu and 0.68 g/t Au.

In the Wells-Barkerville gold belt, International Wayside Gold Mines Ltd drill tested its **Mucho Oro** gold zone, a few hundred metres southeast and along trend from its Bonanza Ledge zone. Williams Creek Explorations Ltd drill tested its **Westport** mesothermal vein property, which is an easterly projection of the Mucho Oro zone.

Northeast of Quesnel, Richfield Ventures Corp completed an extensive trenching program on its **Mouse Mountain** alkalic porphyry prospect.

South-Central - Major Exploration Projects

North of Revelstoke, Selkirk Metals Corp completed another large drilling program on its **Ruddock Creek** zinc-lead-silver, Broken Hill-type property. It successfully traced the faulted-off western extension of the E zone mineralization and extended the mineralized horizon into the Oliver Creek valley, approximately 5 kilometres along the projected strike of the E zone mineralization. The company initiated development planning for a decline near Light Lake to facilitate underground delineation drilling and bulk sampling of the E zone. Consolidated Venturex Holdings Ltd intersected zinc-lead-silver sedex mineralization in drilling on the Carnes Creek zone of its **LJ** property, also north of Revelstoke.

Nine kilometres southeast of the Afton mine, Abacus Mining and Exploration Corp conducted a deep drilling program for copper and gold below its **Ajax West** pit. Drilling results confirm the continuity of mineralization to a vertical depth of at least 300 metres below the existing pit. A resource estimate is expected in 2007.

In the Merritt area, Almaden Minerals Ltd explored several new epithermal gold-silver showings, including the **Prospect Valley (RM zone)**, **Merit** and **Ponderosa** properties. The latter two showings involved their joint venture partner, Consolidated Spire Ventures Ltd. Strongbow Exploration Inc, under an option agreement with Almaden, drilled the JJ prospect on its **Skoonka Creek** epithermal gold target. It also identified new targets within the Discovery-Backburn trend. These are a few of the projects within the emerging Spences Bridge epithermal gold belt between Merritt and Lillooet.

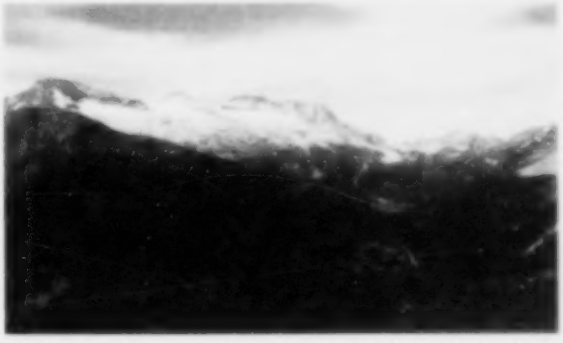

Photo 9. Looking easterly over the Ruddock Creek zinc-lead-silver property (photo by T. Schroeter).

Goldcliff Resource Corp continued to drill its **Panorama Ridge** auriferous skarn property, adjacent to the former Nickel Plate gold mine near Hedley.

Ten kilometres southwest of Vavenby, Yellowjacket Mining Inc completed in-fill and step-out drilling on its Harper Creek copper-zinc volcanogenic massive sulphide deposit. Historic geologic resources were estimated at 96 million tonnes grading 0.41% Cu and 0.05 g/t Au. South of Blue River, Commerce Resources Corp completed a large exploration program at its **Blue River** (Fir/Upper, Fir/Verity) tantalum-niobium bearing carbonatite properties. Besides drilling at Upper Fir, the company began environmental and economic scoping studies and intends to apply for a bulk sampling permit in early 2007 for metallurgical and marketing studies.

East of Lac La Hache, GWR Resources Inc continued drilling on its **Lac La Hache** alkaline porphyry copper-gold property. The company reported its first hole (AZ-06-01) on the Aurizon zone of the Ann property intersected 257 metres grading 0.439 g/t Au and 0.223% Cu, including a higher grade interval of 80 metres grading 0.563 g/t Au and 0.28% Cu.

Kootenays - Major Exploration Projects

Major tungsten and molybdenum exploration drilling programs in the Kootenays were at **Jersey Emerald**, southeast of Salmo and **Sphinx**, southeast of Crawford Bay. Sultan Minerals Ltd announced measured and indicated resources of 2.5 million tonnes grading 0.37% WO_3, at a 0.15% WO_3 cut-off for Jersey Emerald. Eagle Plains Resources Ltd reported inferred resources of 62 million tonnes grading 0.035% Mo, at a 0.01% Mo cut-off for Sphinx.

Exploration spending by Elk Valley Coal Corp on 7 coal projects totalled approximately $6.7 million, including some 47 000 metres of drilling. Exploration was conducted on or adjacent to the **Elkview**, **Fording River (Castle Mountain and Bear Mountain)**, **Greenhills (Cougar North Extension)**, **Line Creek (Horseshoe Ridge)** mines, as well as on the **Wheeler Ridge** property 15 kilometres south of Sparwood and the **Mt. Michael** (Line Creek) property.

Northwest of Kimberley, Stikine Gold Corp drilled a third deep hole (SD 3) following up on its discovery of Sullivan-style mineralization at its **Sullivan Deeps** project in 2004 and 2005. South of Cranbrook, St. Eugene Mining Corp explored the **St. Eugene** mine area and the **Monroe Lake** vein-type base metal prospects.

Klondike Silver Corp continued to expand its holdings in the historic **Sandon** Ag-Pb-Zn camp. The company hopes to place its Silvana mine back into production in 2007.

Photo 10. Sullivan Deeps property drillhole SD3 by Stikine Gold Corporation (photo by D. Grieve).

In the Rossland camp, West High Yield Resources Ltd completed a large drilling program on its **Midnight** mesothermal gold vein mine.

In the Greenwood camp, Merit Mining Corp continued its preliminary assessment of its **Greenwood Gold** project, which includes the **Lexington** and **Golden Crown** properties. The company has approval for removal of a 10 000-tonne bulk sample from the Lexington deposit, as well as approval to construct a 250-tonnes-per-day concentrator on the **Zip** property.

Southwest - Major Exploration Projects

On northern Vancouver Island, Western Copper Corp (formerly Lumina Resources Ltd) plans a drilling program in early 2007 on its **Hushamu** deposit, which contains 231 million tonnes grading 0.28% Cu and 0.31 g/t Au). Near Port Alice, Grand Portage Resources Ltd drilled its **Merry Widow** gold skarn property, testing Merry Widow trend. The company also plans to target the historic Old Sport horizon in 2007 for its bulk tonnage potential. In the historic Cumberland coalfield on Vancouver Island, Compliance Energy Corp drill tested the **Raven** coal property, with historic resources estimated at 38.5 million tonnes of metallurgical coal. Near Port Alberni, Bitterroot Resources Ltd drilled its **Mineral Creek** (Debbie and 900 zones) gold deposits. It plans bulk sampling on the Lower Linda vein and on the 900 zone in early 2007.

Eastfield Resources Ltd released an inferred resource estimate of 87 million tonnes grading 0.31% Cu and 0.016% Mo, at a copper cut-off of 0.2% for its **OK** porphyry property, 40 km north of Powell River. Fifteen kilometres north of Sechelt, Pan Pacific Aggregates Plc drilled its **Sechelt Carbonate** property. A new resource estimate is planned.

In the Harrison Lake area, Pacific Coast Nickel Corp conducted airborne and surface geophysical surveys, as well as geological mapping and prospecting, on its **Big Nic**, **Emory Creek** and **Mount Parker-Mount McNair** magmatic nickel properties. Drilling is planned in 2007.

Thirty five kilometres southeast of Hope, Imperial Metals Corp drilled two holes into the AM breccia zone on its **Giant Copper** porphyry/breccia property. The first hole intersected a 296.7 metre interval grading 0.53% Cu, 0.201 g/t Au, 13.44 g/t Ag and 0.027% Mo., including a higher grade interval of 45.7 metres grading 1.08% Cu, 0.43 g/t Au, 18.73 g/t Ag and 0.036% Mo.

Photo 11. Drilling at Giant Copper by Imperial Metals, fall of 2006 (photo by S. Robertson).

BRITISH COLUMBIA EXPLORATION AND MINING INITIATIVES

During 2006, the Government of British Columbia continued a number of measures to assist mineral resource planning, exploration and development, including the release of the provincial Mining Plan.

- The *British Columbia Mining Exploration Tax Credit Program* provides a 20% refundable tax credit towards B.C. taxes. This program was extended 10 years to December 31, 2016. The combined federal and B.C. Flow Through Shares tax credit programs (referred to as Super Flow Through Shares) were extended to December 31, 2008.
- The B.C. Geological Survey completed geoscience surveys in the northwest VMS and rift area, Terrace

area, northeast coal region, Mountain Pine Beetle infested areas within central B.C., Spences Bridge Gold belt, northern Vancouver Island, Canim Lake area and the Boundary district. Economic geology studies were also carried out on porphyry copper deposits in the Quesnel arc, on industrial minerals and on regional geochemistry (see Figure 11).

- MapPlace, MINFILE, CoalFile and Assessment Report databases were significantly upgraded and expanded, and made more accessible to clients: www.em.gov.bc.ca/geology. Clients can now access over 96% of company mineral assessment reports from the ARIS database on line, for the years from 1947 to the present.
- The Minister of State for Mining led joint government and industry trade missions to China and Toronto.
- Staff completed marketing projects in Denver, Toronto and Vancouver to attract global mineral industry investment to British Columbia, and participated in regional conferences around the province to profile exploration and investment opportunities. Numerous offshore trade delegations met with government representatives in Vancouver and Victoria, regarding the acquisition of a variety of projects and their products.
- Over the past year the B.C. Geological Survey published *Geological Fieldwork 2006*, *Exploration and Mining in British Columbia 2006*, 14 Open File maps and reports, 7 Geoscience Maps, 11 GeoFile maps, reports and data and 5 Information Circulars. All geoscience publications are routinely posted to the Ministry of Energy, Mines and Petroleum Resources' website at: www.em.gov.bc.ca/Geology.

Using funding provided by the B.C. government, Geoscience B.C. sponsored a number of geoscience projects throughout the province. This industry-focused, not-for-profit society forged new partnerships with industry and government agencies to complete a wide variety of projects designed to attract mineral and oil and gas investment to British Columbia.

- Geoscience B.C. released airborne gamma-ray spectrometric and magnetic surveys over the Bonaparte Lake (NTS 92O) area, south-central B.C.. It also contracted an aeromagnetic geophysical survey over the Jennings River (NTS 104) area, northern B.C.; results will be released in early 2007.
- Regional geochemical survey data was released for the Anahim Lake (NTS 93C) and Nechako (NTS 93F) areas by Geoscience B.C. in July, 2006. Several new claims blocks were acquired.

MINERAL EXPLORATION AND DEVELOPMENT OUTLOOK FOR 2007

The positive trends shown by the mineral exploration industry in 2006 include:

- Mineral tenure acquisitions up 20%
- Exploration spending up 20%
- Mineral tenure acquisitions up 20%
- Value of solid mineral production up 24%
- Metres drilled up 26%
- 25 project submissions to government seeking mine development
- Three new mines opened

When these numbers are considered with the number of significant property acquisitions, it should be a busy 2007 exploration season in British Columbia. Many junior companies with projects in the province are already well funded for 2007 programs. As well, many advanced exploration projects expect to have a feasibility study completed in 2007 (*e.g.* **Blue River, Bralorne, Davidson, Elk, Mt. Milligan, New Afton, Schaft Creek, and Ruddock Creek**).

Copper, molybdenum, gold, coal, silver, zinc, nickel, limestone, aggregate and industrial clays are expected to be a focus of exploration throughout the province. Some late-season, large blocks of ground that were acquired in the Quesnel arc and in the Sitlika Assemblage indicate that grassroots exploration is active in the province.

Porphyry copper and molybdenum targets will continue to attract the most investment dollars. The potential for new, high-grade **Eskay Creek**-style, Au-Ag occurrences continues to attract attention, particularly in the northwest for which new geological mapping and deposit models have been released by the B.C. Geological Survey. Precious metals-enriched volcanogenic massive sulphide deposits are also good targets. With the strong zinc and lead prices, the search for sedex deposits in the southeast and, in the Gataga belt in the northeast, and Broken Hill-type deposits in the Revelstoke area is expected to intensify.

Production, development and exploration activities in the northeast (*e.g.* **Belcourt Saxon**, **Brule**, **Horizon**, **Perry Creek**, **Trend** and **Goodrich-Central**) and southeast (*e.g.* **Lodgepole**) will continue to increase. In the northwest, the **Mount Klappan** anthracite coal deposit is being considered for development. The numerous new discoveries in 2006 will be explored in detail; hopefully some will be advanced to the drilling stage.

In 2007, seven new mines (or re-openings/expansions) **Brule**, **MAX**, **Orca**, **QR**, **Sandon**, **Swamp Point** and **Trend** expansion may start up, with total capital costs estimated at $450 million and creating over 600 new full-time jobs.

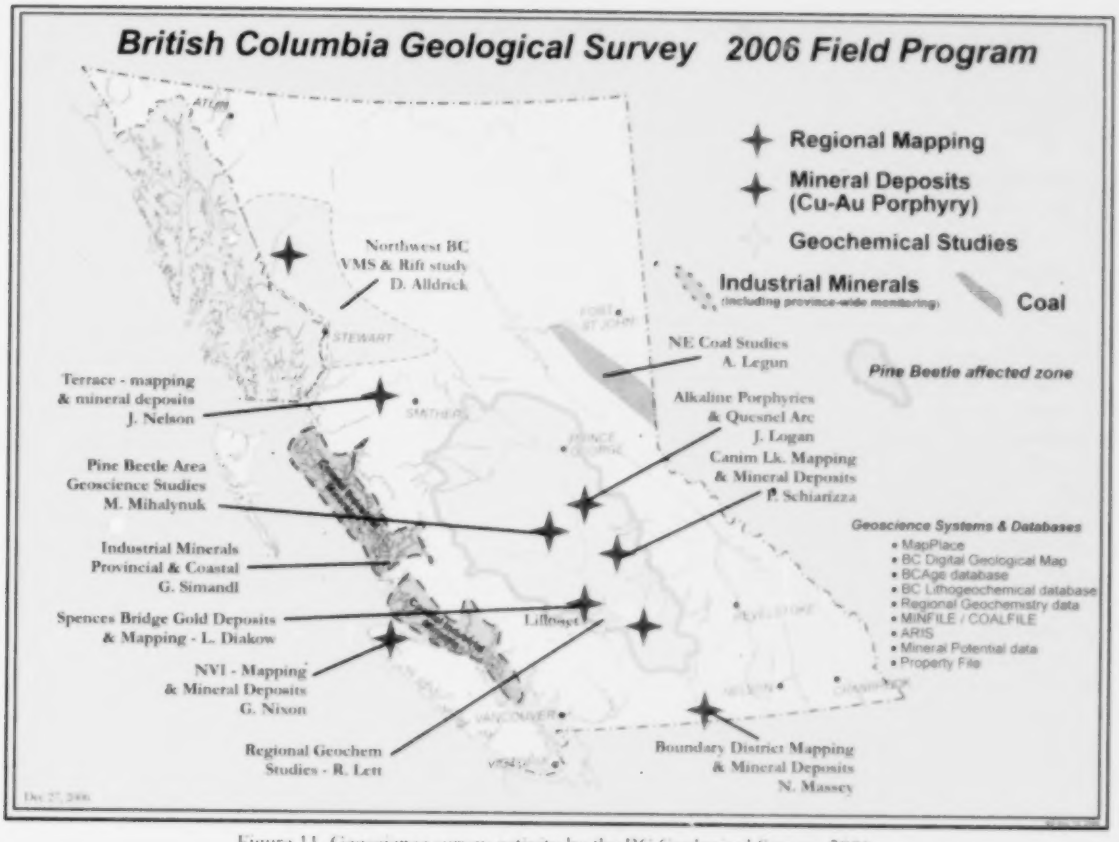
British Columbia Geological Survey 2006 Field Program
Regional Mapping
Mineral Deposits (Cu-Au Porphyry)
Geochemical Studies
Industrial Minerals
(including province-wide monitoring)
Coal
Pine Beetle affected zone
Northwest BC VMS & Rift study D. Alldrick
NE Coal Studies A. Legun
Terrace - mapping & mineral deposits J. Nelson
Alkaline Porphyries & Quesnel Arc J. Logan
Canim Lk. Mapping & Mineral Deposits P. Schiarizza
Pine Beetle Area Geoscience Studies M. Mihalynuk
Industrial Minerals Provincial & Coastal G. Simandl
Spences Bridge Gold Deposits & Mapping - L. Diakow
NVI - Mapping & Mineral Deposits G. Nixon
Regional Geochem Studies - R. Lett
Boundary District Mapping & Mineral Deposits N. Massey
Geoscience Systems & Databases
• MapPlace
• BC Digital Geological Map
• BCAge database
• BC Lithogeochemical database
• Regional Geochemistry data
• MINFILE / COALFILE
• ARIS
• Mineral Potential data
• Property File

Figure 11. Geoscience survey activity by the BC Geological Survey, 2006.

Coal production from the Peace River coalfields is expected to increase dramatically as the new **Trend** and **Wolverine** mines mature and expand production and the **Brule** deposit is brought into production. The general attractiveness of these coal resources is underlined by Anglo Coal Canada Inc's recent significant investment in the Peace River coalfields.

Operating mines, such as **Gibraltar** and **Highland Valley Copper**, will focus their efforts on programs aimed at extending their respective mine lives.

Industrial minerals production continues to grow steadily through developing additional markets and mining more commodities. In particular, offshore aggregate shipments to the Californian markets are poised to start in substantial quantities. In 2007, it is anticipated that industrial clays, limestone and aggregate sales will improve. Sulphur sales are expected to be particularly strong again next year.

More investment by international companies is expected, particularly for mine development projects. This has been foreshadowed by the recent interest by Chinese companies in the northeast coalfields (e.g. Canadian Dehua International), as well as in the metals sector (e.g. Jiangxi Copper). The province has great potential for increased exports to Asia and the important role it can play in the future as Canada's Pacific Gateway.

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NORTHWEST REGION

By Paul Wojdak, PGeo
Regional Geologist, Smithers

SUMMARY AND TRENDS

Mineral exploration activity in 2006 increased for the fourth successive year due to robust prices for copper, molybdenum, gold and silver. Exploration spending in the Northwest is estimated at $128 million, a 25% increase over 2005 (*see* Figure 2.1). There were 66 large projects, 63 of which included drilling. Many dormant prospects were reactivated and required confirmation drilling to bring historic resources into line with current Security Exchange standards. This contributed to the large upsurge in exploration drilling to about 310 000 metres (*see* Figure 2.2).

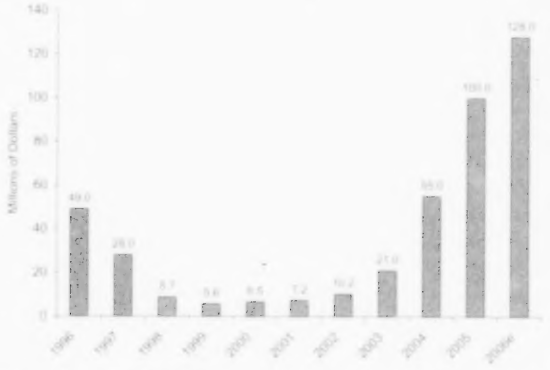

Figure 2.1. Exploration expenditures in Northwest British Columbia.

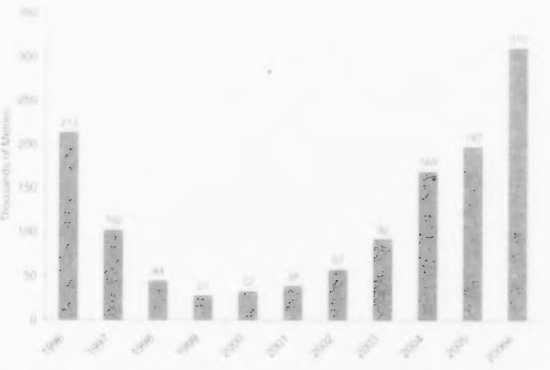

Figure 2.2. Exploration drilling in Northwest British Columbia.

The three major mines in the region, Endako, Eskay Creek and Huckleberry, operated very profitably in 2006. The Endako open pit molybdenum mine was acquired by Blue Pearl Mining Ltd. No changes to the operation are expected which is estimated to have a 7-year mine life. Gold and silver production from the rich Eskay Creek mine decreased. Owned by Barrick Gold Corporation, ore reserves will be exhausted in early 2008. Huckleberry Mines Ltd. applied to government agencies to mine an extension of ore at its open pit copper mine that would extend mine life to 2010. Table Mountain, a small underground gold mine, resumed operation late in the year. Seasonal production of barite continued at the Fireside mine. The Swamp Point aggregate project obtained an Environmental Assessment Certificate and a Mines Act permit and the site was prepared for production in 2007.

Environmental Assessment (EA) project reports were submitted for the Galore Creek copper-gold and Ruby Creek molybdenum projects. Five other mine developments are in the EA process: Kutcho copper-zinc, Mount Klappan coal, Schaft Creek copper-molybdenum-gold, Davidson molybdenum and Morrison copper-gold projects. The Tulsequah Chief copper-zinc-silver-gold and Red Chris copper-gold projects hold development certificates. Asian metal refining companies have a growing interest to invest in development projects in exchange for assured supply of metal concentrate.

Porphyry copper, gold and molybdenum deposits were the most popular exploration targets followed by volcanogenic massive sulphide deposits. As of the end of the year assay results were incomplete or not available. Results disclosed to date point to several promising discoveries or significant extensions of known deposits including (in the order they appear in the text):

- Tulsequah (new gold-silver rich massive sulphide zone)
- Galore Creek (deep drilling on the Bountiful copper-gold zone)
- Davidson (delineation of a second molybdenum zone)
- New Polaris (in-fill drilling on C-vein gold deposit)
- GJ (enhanced copper and gold grade near surface)
- Kerr-Sulphurets (extensive bulk-tonnage gold in the Mitchell zone)

- Snowfields (drill delineation of a major gold resource)
- Barbara (new lead-zinc-silver showing near Stewart)
- Shan (potentially significant molybdenum discovery)
- Lucky Ship (large increase in molybdenum resource)
- Seel (high copper grade breccia zone)

All of the operating mines in the region are listed in Table 2.1 and shown on the map (Figure 2.3). Major exploration projects are listed in Table 2.2.

MINES AND QUARRIES

METAL MINES

The **Eskay Creek** mine, owned by Barrick Gold Corporation, produced 5350 kg (172 000 oz) of gold and 323 350 kg of silver in 2005. The total amount mined was 181 869 tonnes of which 78 377 tonnes was direct-to-smelter ore. Production for 2006 is projected from third quarter data to be 3500 kg gold and 170 000 kg of silver. The supply of high-grade, direct-to-smelter ore has decreased and contributed to lower gold and silver production. Since start-up in 1995 ore grade has diminished and at the beginning of 2006 the average reserve grade was 27.8 g/t gold and 1435 g/t silver. The mine is an underground trackless operation which utilizes a drift-and-fill mining method with cemented rock backfill. The gravity and flotation mill has a capacity to treat 330 tonnes of ore per day. Direct-to-smelter ore contains high levels of mercury and arsenic.

Eskay Creek is a volcanogenic massive sulphide deposit with exceptional gold and silver content and occurs at the top of the early Jurassic Hazelton Group. Higher-grade ore is stratabound and occurs in a contact mudstone bounded below by a rhyolite flow-dome complex and overlain by basalt and sedimentary rocks in the west limb of a north-plunging fold. Lower grade ore occurs in discordant zones in the underlying rhyolite and dacite. Sphalerite, pyrite, tetrahedrite and galena are the most abundant ore minerals. Gold occurs mainly as microscopic grains between and within sulphide minerals, or locked in pyrite.

Majority ownership of the **Endako** open-pit molybdenum mine was acquired in 2006 by Blue Pearl Mining Ltd. which purchased the 75% interest held by Thompson Creek Mining Ltd. Estimated molybdenum production for 2006 is 5480 tonnes from about 10 million tonnes of ore with an average grade of 0.069% molybdenum. Reserves of 66.9 million tonnes grading 0.062% molybdenum are sufficient until 2013. The mill normally processes 30 000 tonnes per day and recovers about 78% of the molybdenum sulphide, all of which is converted to molybdic oxide in an on-site roaster. In 2004 Endako halted co-production of Ultrapure, its trademarked molybdenum sulphide lubricant, in favour of producing more oxide, which is more profitable. Stripping continued in 2006 in order to stabilize the south wall of the pit and to expose more ore (Figure 2.4). The mine employs 260 people.

Endako is a porphyry molybdenum deposit within the early Cretaceous Francois Lake granite batholith. Mineralization is related to an aplitic phase that intrudes an older coarse-grained variety. The ore body is a 3.5-kilometre long stockwork zone that is elongated to the west-northwest and dips about 50° south to a depth of 330 metres. The hanging wall of the ore zone is delineated by the South Basalt fault. Exploration drilling (5941 m in 39 holes) focused 500-1000 m east of the plant site, south of the tailings impoundment, and secondarily near the West Denak pit. Further work is planned in both areas in 2007.

The **Huckleberry** copper mine is operated by Huckleberry Mines Ltd. and owned 50% by Imperial Metals Corp. and 32% by Mitsubishi Material Corp. The remaining 18% is shared equally among Dowa Mining Ltd., Furakawa Company Ltd. and Marubeni Corp. The mine is located 123 kilometres by road south of Houston at the foot of Huckleberry Mountain (Figure 2.5) and employs 260 people including contractors. Copper production for 2006 is forecast at 34 000 tonnes, similar to 2005. In 2005 the mill processed 6 951 000 tonnes of ore grading 0.552% copper and 0.014% Mo. Copper recovery in 2005 averaged 87.4% but molybdenum recovery was just 24.8%. Copper concentrate is trucked to the port of Stewart for shipment to Japan and molybdenum concentrate is trucked to Vancouver. Huckleberry mine repaid $120.9 million of debt in 2006, including a $9.8M loan from the British Columbia government, and is now debt-free. Subject to permit approval, Huckleberry will mine an extension of the Main ore zone. Work over the past 2 years defined reserves of 17.4 million tonnes at 0.366% copper, above a cut-off grade of 0.22%. This will increase mine life by two years to 2010.

Figure 2.4. Benching the south wall of the Endako Pit.

Figure 2.3. Location map, Mines and Exploration Projects in Northwest British Columbia, 2006.

TABLE 2.1. MINE PRODUCTION AND RESERVES, NORTHWEST REGION

Mine	Operator	Employment	2006 Production (Unofficial, approx)	Reserves (effective date)
Endako	Blue Pearl Mining Ltd. & Sojitz Moly Resources Inc.	260	5480 t molybdenum	Endako Pit, 21.7 mt at 0.069% Mo; Denak Pit, 22.7 mt at 0.069% Mo; Stockpile, 22.5 mt at 0.046% Mo (Oct. 1, 2006)
Eskay Creek	Barrick Gold Corp.	295	3500 kg gold, 170 000 kg silver	243 000 t at 27.8 g/t Au, 1435 g/t Ag (Dec 31, 2005)
Huckleberry	Huckleberry Mines Ltd. (50% Imperial Metals Corp.)	260	34 000 t copper 270 t molybdenum	12.25 mt at 0.526% Cu, 0.015% Mo (Dec 31, 2005)
Table Mountain	Cusac Gold Mines Ltd.	30	December start-up	40 000 t at 16.9 g/t Au
Fireside	Fireside Minerals Inc.	25 (seasonal)	12 000 t barite	Not available

TABLE 2.2. MAJOR EXPLORATION PROJECTS IN NORTHWEST REGION

Property	Operator	MINFILE	Commodity	Deposit Type	Work Program
Ajax	Tenajon Resources Corp.	103P 223	Mo	Porphyry	DD (~3400 m, 6 holes)
Ball Creek	Paget Resources Corp.	104G 018, 042	Cu, Au	Porphyry	Geol; DD (~900 m, 4 holes)
Barbara	Mountain Boy Minerals Ltd.		Ag, Pb, Zn	VMS ?	DD (1183 m, 14 holes)
Beale Lake	Sutcliffe Resources Inc.	104I 098	Au	Intrusion-related	DD (1928 m, 10 holes)
Big Onion	Eagle Peak Resources Ltd.	93L 124	Cu, Mo, Au	Porphyry	DD (2700 m, 11 holes)
BQ	Endurance Gold Corp.		Au	Epithermal	G; IP; DD (2017 m, 11 holes)
Bronson Slope	Skyline Gold Corp.	104B 077	Au, Cu	Porphyry	DD (700 m)
Clone	Canasia Industries Corp.	103P 251	Au	Shear Vein	AB-EM; DD (988 m, 7 holes)
Coal Creek	West Hawk Development Corp.	93L 147	Thermal coal	Coal	RC (1474 m, 15 holes)
Coles Creek	Callinan Mines Ltd.	93E 042	Cu, Mo	Porphyry	GC; IP; DD (4495 m, 8 holes)
Copper Creek	Firesteel Resources Inc.	104J 035	Cu, Au	Porphyry	TR (1700 m)
Corey	Kenrich Eskay Mining Corp.	104B 240, 387	Au, Ag	Epithermal VMS	DD (12 914 m, 54 holes)
Davidson (Yorke-Hardy)	Blue Pearl Mining Ltd.	93L 110	Mo	Porphyry	EN; UG (50 m); DD (7568 m, 30 holes)
Del Norte	Sabina Resources Limited	104A 176, 161	Au, Ag	Epithermal Vein	DD (3060 m)
Double Ed	Kenrich Eskay Mining Corp.	103P 025	Cu, Zn	VMS	AB-EM; DD (13 000 m, 51 holes)
Eaglehead	Carmax Explorations Ltd.	104I 008	Cu, Au	Porphyry	DD (3076 m, 10 holes)
Electrum	American Creek Resources Ltd.	104B 033	Au, Ag	Vein	TR; DD (2797 m, 21 holes)
Endako	Blue Pearl Mining Ltd.	93K 006	Mo	Porphyry	DD (5941 m, 35 holes)
Fireweed	Argentor Resources	93M 151	Ag, Pb, Zn	Manto, Replacement	DD (937 m)
FR	Mountain Boy Minerals		Ag	Vein	DD (1300 m)
Galore Creek	NovaGold Inc.	104G 090	Cu, Au	Skarn, Alkalic Porphyry	DD (36 208 m, 67 holes); FS
GJ	Canadian Gold Hunter Corp.	104G 086	Cu, Au	Porphyry	DD (18 133 m, 62 holes)

TABLE 2.2. CONTINUED

Property	Operator	MINFILE	Commodity	Deposit Type	Work Program
Golden Eagle	Signet Minerals Inc.	104M 057, 074, 085	Au	Epithermal Vein; VMS	DD (945 m, 6 holes)
Granduc	Bell Resources Corp.	104B 021	Cu, Ag, Au	VMS	G; DD (3927 m, 12 holes)
Homestake Ridge	Bravo Venture Group Inc.	103P 216	Au, Ag	Vein	DD (6532 m, 28 holes)
Kerr-Sulphurets	Seabridge Gold Inc.	104B 103, 182	Cu, Au	Porphyry	DD (9100 m, 29 holes)
Klappan	Fortune Minerals Limited	104H 021	Anthracite	Coal	EN; FS
Kutcho Creek	Western Keltic Mines Inc.	104I 060	Cu, Zn, Ag, Au	VMS	EN; DD
Louise Lake	North American Gem Inc.	93L 079	Cu, Au, Mo	Porphyry	DD(3387 m, 12 holes)
Lucky Ship	New Cantech Ventures Inc.	093L 053	Mo	Porphyry	DD (~6000 m)
Maple Leaf	Saturn Minerals Inc.	104K 117	Cu, Zn, Ag, Au	VMS	DD (1346 m, 7 holes)
Mess Creek	Paget Resources Corp.	104G 040	Cu, Au	Porphyry	DD (~800 m)
Molybdenum Creek	BCM Resources Corp.	103I 016	Mo	Porphyry	DD (~1000 m)
Newmont Lake	Romios Gold Resources Inc.	104B 281, 282	Au, Cu	Skarn	IP; DD (771 m, 10 holes)
New Polaris	Canarc Resource Corp.	104K 003	Au	Mesothermal Vein	DD (24 394 m, 69 holes)
Peak	Grizzly Diamonds Ltd.	93M 015	Au, Ag	Vein	AB-EM; DD (1445 m, 7 holes)
Poly	Lateegra Resources Corp.	104A 026, 128	Au	Shear Vein	DD (~700 m)
Porcher Island	Cross Lake Minerals Ltd.	103J 017	Au	Vein	DD
RDN	Northgate Minerals Corp.	104G 144	Au, Ag, Pb, Zn	VMS	AB-EM; DD (~1300 m)
Red Bird	Torch River Resources Ltd.	93E 026	Mo	Porphyry	DD (2134 m, 7 holes)
Red Chris	bcMetals Corporation	104H 005	Cu, Au	Porphyry	DD (4676 m, 14 holes)
Ruby Creek	Adanac Molybdenum Corp.	104N 052	Mo	Porphyry	DD (2688 m, 13 holes)
Schaft Creek	Copper Fox Metals Inc.	104G 015	Cu, Mo, Au	Porphyry	DD (9008 m, 42 holes); EN
Seel	Gold Reach Resources Ltd.	93E 105	Cu, Au	Porphyry	DD (6046 m, 25 holes)
Shan	BCM Resources Corp.	103I 114	Mo	Porphyry	DD (3550 m in 20 holes)
Silver Coin	Pinnacle Mines Ltd.	104B 095	Au, Ag, Pb, Zn	Epithermal	DD (24 206 m, 115 holes)
Snip North	Newcastle Minerals Ltd.	104B 089	Au, Cu	Porphyry	DD (1095 m, 5 holes)
Snowfield	Silver Standard Resources Inc.	104B 179	Au	Porphyry	DD (6141 m, 27 holes)
Storie	Columbia Yukon Explorations Inc.	104P 069	Mo	Porphyry	DD (5000 m, 20 holes)
Summit Lake	Tenajon Resources Corp.	104B 034	Au	Intrusion-related vein	UG (110 m); DD 3650 m, 26 holes)
Tag	CZM Capital Corp.	104M 079, 080	Au, Ag	Epithermal Vein	DD (3108 m, 23 holes)
Taurus	Cusac Gold Mines Ltd.	104P 016, 077	Au	Orogenic gold	G; GC; TR; DD (3300 m, 21 holes)
Thomlinson Creek	Dentonia Resources Ltd.	93M 122	Mo	Porphyry	DD (837 m, 3 holes)
Todd Creek	Goldeye Exploration Ltd.	104A 001	Cu, Au	Vein	DD (1331 m, 8 holes)

TABLE 2.2. CONTINUED

Property	Operator	Minfile	Commodity	Deposit Type	Work Program
Tonga	Teuton Resources Corp.	103P 156	Ag, Au	Vein	AB-EM; DD (1372 m, 7 holes)
Tulsequah Chief	Redfern Resources Ltd.	104K 001, 002	Cu, Zn, Ag, Au	VMS	DD (~24 000 m, 67 holes) FS
Turnagain	Hard Creek Nickel Corp.	104I 051, 119, 120	Ni, Pd, Pt	Magmatic	DD (19 122 m, 68 holes)
Voigtberg	BC Gold Corp.	104G 146	Au	Intrusion-related	G, DD (717 m, 4 holes)
Williams Gold	Arcus Development Group Inc.	94E 028	Cu, Mo, Au	Porphyry	DD (864 m, 5 holes)
Yellow Jacket	Prize Mining Corp.	104N 043	Au	Orogenic gold	DD (750 m, 10 holes)

Work Program Abbreviations: A = access, trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (X m) = diamond drilling, totaling X metres; EN = environmental (baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; OP BU = open pit bulk sample; P = prospecting; PD = percussion drilling; PE = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching; UG (X m) = X metres of underground development; UG BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)

Figure 2.5. Huckleberry Mine as seen from the southeast.

Huckleberry is a porphyry copper deposit related to the late Cretaceous Bulkley intrusions. Copper mineralization, which occurs in two zones (Main and East) one kilometre apart, is developed within a granodiorite stock and in the adjacent hornfelsed and fractured volcanic rocks. The ore is a stockwork of quartz, pyrite and chalcopyrite, crosscut by gypsum-filled fractures. The Main and East zones are disrupted by the 105 Fault which resulted in 100 m of right lateral offset. The East zone is also disrupted by a younger structure, the 150 Fault which resulted in 200 m right lateral displacement. The Main Zone Extension, outlined by drilling in 2004 and 2005, represents the faulted portion of the Main zone north of the 105 Fault.

Cusac Gold Mines Ltd. prepared to reopen the **Table Mountain** gold mine, closed since 1997. Reserves in the Rory and Bain veins are 40 000 tonnes grading 16.9 g/t gold. The Fourteen level of the formerly tracked mine was slashed to accommodate mechanized equipment to access the Rory vein. Milling was scheduled to begin in December.

INDUSTRIAL MINERAL QUARRIES

At **Fireside**, 125 km east of Watson Lake, Fireside Minerals Ltd. of Calgary produced 12 000 tonnes of barite. Mining and trucking were contracted to Jedway Enterprises Ltd. of Watson Lake. Run-of-mine material was concentrated using jigs at the mine site then crushed and bagged at a plant in Watson Lake. Fireside employs 25 people on a seasonal basis. The product is used in the very active western Canadian oil and gas drilling industry where the current demand for barite drilling mud is strong. Fireside barite occurs in two coarse-grained, fault-controlled veins within rocks of the lower Paleozoic Kechika Group.

Four jade properties were active in the Dease Lake and Cassiar areas: Cassiar, Polar Jade, Provencher Lake and TJ. Nephrite jade is found at the contact between tectonically emplaced serpentinite and argillite within the Cache Creek and Slide Mountain oceanic terranes. Cassiar Jade Contracting Ltd. continued to produce high-quality jade by sorting rock in the waste dump at the closed **Cassiar** chrysotile asbestos mine (MINFILE 104P 005), employing up to 5 people. Jedway Enterprises Ltd. carried out a small exploration drilling program at **Polar Jade** (MINFILE 104I 083) near Serpentine Lake. At **Provencher Lake** (MINFILE 104I 073, 092), Glenpark Resources Ltd. hauled boulders of mid-quality jade to Dease Lake for transshipment to Washington state for use in the building industry. King Mountain Jade Mines Inc. recovered jade boulders from the **TJ** claims (MINFILE 104I 064) near Provencher Lake area for sale in Dease Lake and Jade City.

MINE DEVELOPMENT PROJECTS

Adanac Moly Corp. announced proven and probable open pit reserves for the **Ruby Creek** molybdenum project (104N 052) to be 113.4 million tonnes grading 0.066% Mo at a cut-off grade of 0.04% Mo. The calculation was based on vertical holes; 13 new angle holes were drilled to provide material for a metallurgical study and to intersect steep molybdenite veins (Figure 2.6) not incorporated in the resource estimate. Optical and acoustic televiewers were lowereddown some holes to investigate the orientation of veins. The deposit is a quartz-molybdenite stockwork that occurs near the top of a multi-phase satellite of the highly differentiated Surprise Lake granite batholith. Molybdenite veins are predominantly sub-horizontal and are preferentially located in a flat-lying aplite body. The 150 to 200 metre thick, blanket-shaped molybdenum zone lies near the surface in the broad valley of upper Ruby Creek, and is rooted in the steeply dipping, north-trending Boulder Creek fault. The project report was submitted to the BC Environmental Assessment office.

Redfern Resources Ltd. completed 24 000 metres of core drilling at the **Tulsequah Chief** and **Big Bull** volcanogenic massive sulphide deposits (MINFILE 104K 002, 003) and identified two areas where mineral resources may be increased. At Tulsequah Chief, mineralization was discovered west of the 4400 fault, a structure that formed the western boundary of past mine production. The A-zone Extension was intersected by five holes, the best of which returned 1.69 g/t gold, 177.6 g/t silver, 0.98% copper, 0.85% lead and 5.24% zinc over a core length of 11.85 m. A high-grade discovery was made southwest of Big Bull where a drillhole intersected 20.0 g/t gold, 253.4 g/t silver, 11.6% lead and 26.6% zinc over an estimated true width of 5.0 metres. This is a top priority for follow-up drilling in 2007. Drilling along strike north of Big Bull obtained narrow intercepts of low grade mineralization. Measured and indicated resources on the Tulsequah deposit stand at 5.38 million tonnes at a grade of 1.41% copper, 1.32% lead, 6.73% zinc, 2.73 g/t gold and 100.8 g/t silver. A new resource estimate will be prepared once all 2006 results are available, and incorporated in a new feasibility study for mine development. The project has Canadian and Provincial environmental approval.

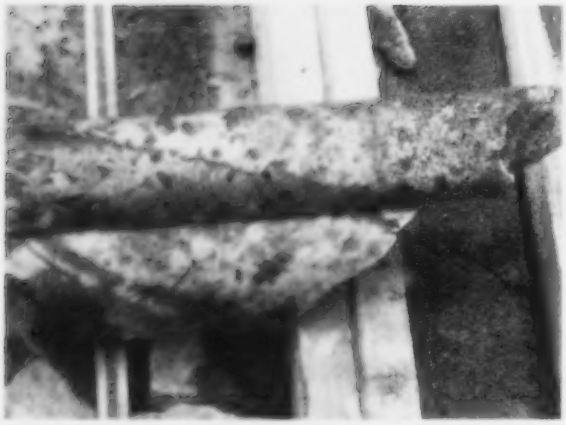

Figure 2.6. Steep angle molybdenite vein in Surprise Lake granite at Ruby Creek.

Western Keltic Mines Inc. continued to fulfill requirements of the Environmental Assessment process for the **Kutcho Creek** project and also commissioned a pre-feasibility study. The Kutcho Creek volcanogenic massive sulphide deposit (MINFILE 104I 060) is located 100 km east of Dease Lake. Three elongate sulphide lenses are arranged en echelon over a strike length of 3.5 km within folded felsic volcanic rocks of early Triassic age. Western Keltic completed a 2200 metre in-fill drilling program on the Main deposit which has an open-pit resource of 14.2 million tonnes grading 1.86% copper, 2.44% zinc and 33 g/t silver.

Fortune Minerals Limited advanced the **Klappan** anthracite coal project through requirements of the Environmental Assessment process toward approval of a 1.5 to 3 million tonne per year open pit mine. This included an engineering study of a direct road route from the site to Highway 37 that would reduce the proposed haulage distance to the port of Stewart to 250 km. Fortune Minerals is also conducting a pre-feasibility study of building a 300 megawatt coal-fired power plant at the mine site that would be linked to the BC power grid. The Klappan-Groundhog coalfield is in the northern Bowser Basin, a mid to late Jurassic marine basin filled with clastic sediments that culminated in a deltaic environment including coal measures. Anthracite is a premium coal with the highest rank, carbon and energy content, and lowest moisture and volatile content of all coals. It can be used in a wide variety of specialty applications including water purification, briquettes and as a metallurgical reductant and steel manufacture as an ultra-low volatile PCI coal (pulverized coal injection). Coal resources at Mount Klappan (MINFILE 104H 021) occur in four deposits: Lost Fox, Hobbit-Broatch, Summit and Nass. They contain 107.9 million tonnes classified as measured, 123 million tonnes as indicated and 2.572 billion tonnes classified as inferred and speculative. These are compliant with NI 43-101.

beMetals Corporation announced an agreement with Global International Jiangxi Copper Mining Company Limited to form a limited partnership to develop the **Red Chris** project (MINFILE 104H 005). The deal is subject to approval by shareholders and to satisfactory results from verification drillholes in the Main and East zones. Drilling was also carried out in the Gully zone aimed at extending resources but the 7000 m program was curtailed by winter conditions. Mineable reserves at Red Chris, exclusive of low grade stockpile material, are estimated at 185.4 million tonnes at 0.414% copper and 0.325 g/t gold. The project has been approved for development by the Environmental Assessment office. Late in 2006 Imperial Metals

Corporation and Taseko Mines Limited made competitive bids to acquire majority ownership of bcMetals Corp.

Copper Fox Metals Inc. continued drilling to confirm grades and to collect material for metallurgical study from the **Schaft Creek** porphyry copper deposit (MINFILE 104G 015). The program amounted to 5300 m of P-size core in 25 holes and 3708 m of H-size core in 17 holes (Figure 2.7). The property, located 50 km south of Telegraph Creek, is estimated from historic drilling to contain a combined measured and indicated resource of 626 million tonnes grading 0.35% copper, 0.026% molybdenum and 0.21 g/t gold, at a 0.3% copper equivalent cut-off. Chalcopyrite and bornite occur in narrow, structurally disrupted veinlets within volcanic rocks adjacent to the Hickman granodiorite batholith. In 2006 an unusual occurrence of free gold was reported that gave rise to an intercept of 19.5 g/t gold over 15.1 m with an associated copper grade of 0.34%. Though very encouraging, the occurrence underscores the challenge of accurate estimation of gold grade for the deposit. Copper Fox began the Environmental Assessment process to seek approval for mine development.

On the **Galore Creek** project, NovaGold Inc. completed the project report required by the Environmental Assessment office, signed a participation agreement with the Tahltan First Nation and completed a feasibility study. The latter is based on proven and probable reserves totaling 540.7 million tonnes grading 0.557% copper and 0.303 g/t gold, which in turn are contained within a measured and indicated resource of 748.9 million tonnes at 0.52% copper, 0.30 g/t gold and 4.9 g/t silver, at a 0.25% copper equivalent cut-off. Exploration drilling focused on the Bountiful zone, which lies at depth beneath and to the east of the proposed Central zone pit. About 20 holes spaced 150-200 m apart were completed, and some returned long copper-gold intercepts. For example, hole GC06-0712 cut 292.9 m that assayed 0.63% copper and 0.47 g/t gold.

Figure 2.7. Logging P-size drill core with Schaft Creek copper deposit in the background.

The Bountiful zone is now known to be 1000 m long by 700 m wide and averages more than 200 m in thickness. Four holes tested for a connection between the Bountiful and West Fork zones. On the adjoining Grace claims, under option from Pioneer Metals Corporation, NovaGold drilled six condemnation holes (Figure 2.8) that augmented 16 exploration holes (3123 m) drilled in 2004 and 2005. These did not intersect significant mineralization.

Figure 2.8. Danette Schwab views stacked drill core at Galore Creek.

Blue Pearl Mining Ltd. continued work on the **Davidson** molybdenum deposit (MINFILE 93L 110) which has a NI 43-101 compliant resource of 75.3 million tonnes grading 0.177% molybdenum based on exploration between 1965 and 1980. The deposit is located 10 km west of Smithers and current mine development plans are to truck ore to the Endako mine for processing. A 2 km-long adit on Hudson Bay Mountain at the 1066 m elevation provides access to the deposit and was utilized to complete 2658 metres of in-fill drilling to better define the high grade portion of the deposit. The Davidson deposit occurs in silicified granodiorite 300 m above a small quartz porphyry intrusion. A poorly known lower mineralized zone at the top of quartz porphyry plug was tested by 14 holes (4910 m) in 2006. These delineated a flat-lying zone at the top of the quartz porphyry plug that is about 45 m thick and averages about 0.24% Mo. A follow-up drilling program began late in 2006 to further delineate the lower molybdenum zone. Drilling of a pilot hole for a new adit at 700 m elevation (Figure 2.9) was halted and will re-commence in early 2007.

MINERAL EXPLORATION

ATLIN AREA

On the extensive **Golden Eagle** property located 60 km northwest of Atlin, Signet Minerals Inc. followed up

Figure 2.9. Jim Hutter at the collar of a flat drillhole - the pilot for a proposed lower adit for the Davidson deposit.

on significant gold drill intercepts from 2005 and tested a possible volcanogenic massive sulphide target with a six drillhole (945 m) program. In the Tannis zone (MINFILE 104M 074) quartz-arsenopyrite veins fill joints and fractures in a north-striking, steep dipping rhyolite dike that is more than 100 m wide. In 2005, two vein intervals 50 m apart returned 12.0 g/t gold over 3.5 m and 10.7 g/t gold over 5.5 m. The first hole in the 2006 program intersected similar material but no results were available at time of writing. Three drillholes cored altered mafic volcanic rocks in the Carbonate zone (MINFILE 104M 057) where a quartz-carbonate stockwork was postulated to underlie a VMS deposit, and two other holes tested the Skarn and Plateau zones.

In the heart of the Atlin placer gold camp, Prize Mining Corporation commenced a bulk sampling program on the **Yellow Jacket** gold prospect (MINFILE 104N 043). Pine Creek was diverted to enable stripping of 10 metre-thick surface gravel and excavation of a 30 by 90 metre pit. Hydrologic and metallurgical investigations were carried out earlier in the year. Native gold at Yellow Jacket occurs in quartz-filled dilational structures adjacent to the Pine Creek shear zone which places sheared serpentinite against more competent mafic volcanic rocks. Prize Mining also carried out an extensive soil geochemical survey of the **LD** property (MINFILE 104N 098, 100) 15 km southwest of Yellow Jacket, targeting another potential bedrock source of placer gold. Samples were collected at one metre depth using an auger mounted on a bobcat. Two strong gold anomalies were identified.

CZM Capital Corp. drilled 23 core holes to test epithermal gold-silver mineralization on the **Tag** property (MINFILE 104M 079) located on the Taku Arm of Tagish Lake 35 km west of Atlin. The 025 fault is a 6 km long steeply dipping, splay structure off the regional-scale Llewellyn fault and forms a pronounced topographic depression. Banded and vuggy quartz with sparse pyrite fill open space in a fault breccia of Laberge Group greywacke. Drilling focused in two areas 400 metres apart and tested to 200 metre below surface. Assays from 12 holes were available at time of writing and a typical intercept graded 2.7 g/t gold and 15.1 g/t silver over 12.45 m. Previous work indicates true width of the fault zone is 5-10 metres.

TULSEQUAH-TAKU AREA

At the **New Polaris** gold property (MINFILE 104K 003), across the Tulsequah River from the Tulsequah Chief project, Canarc Resource Corp. completed 65 core holes (24 000 m) of an in-fill drilling program intended to upgrade a historic resource of 3.26 million tonnes grading 12.3 g/t gold to a mining reserve. The current program reduces the spacing between drill intercepts from 60 to 30 metres, beginning down dip of two stopes in the former Polaris-Taku mine. Gold is associated with disseminated arsenopyrite and pyrite in conjugate, shear-controlled quartz-ankerite vein stockworks and listwanite alteration developed within Devonian mafic volcanic rocks. Drilling in 2006 traced the C-vein to 350 m below surface and returned consistently positive results. The first recorded sighting of visible gold, in association with stibnite, was made in core from three holes along the western margin of the in-fill grid and returned exceptional intercepts, such as 44.7 g/t gold over 6.2 m. In addition the C-vein was found to thicken to the northeast beyond the area of previous drilling. All holes were collared on the flood plain of the Tulsequah River (Figure 2.10) and typically penetrate 10 m of river gravel, 75 m of varved glacial clay and 15 m of basal till before entering bedrock. Boulders in the basal till caused drilling deviation that required numerous holes to be re-collared and also resulted in less precise spacing of ore-zone intercepts than was sought. Consequently, Canarc will pump water from the mine workings and begin underground drilling in 2007.

Saturn Minerals Inc. explored its **Maple Leaf** (MINFILE 104K 117) volcanogenic massive sulphide

Figure 2.10. Richard Cote aligns a diamond drill at New Polaris.

property located 73 km south of Atlin and 20 km northwest of Tulsequah Chief. Polymetallic sulphide boulders were discovered in 1990, below an intense gossan developed in a cliff-face of Paleozoic felsic volcanic rocks. The 2006 seven-hole, 1346 metre diamond drilling program was the first drilling completed on the property.

CASSIAR-RANCHERIA AREA

Cusac Gold Mines Ltd. explored for new gold veins on the **Taurus II** property using LIDAR imagery, soil geochemistry (2700 samples), geological mapping and trenching, prior to diamond drilling. LIDAR is a high resolution optical imaging system used to detect rock structures by mapping topography below surface vegetation. Gold occurs in quartz-sulphide veins in mafic volcanic rocks with the highest sulphide content and gold grade being found immediately below capping listwanite-altered serpentinite and argillite that do not sustain open fractures. Less than half of planned 8000 metre drilling program was completed at time of writing. The Oro vein, part of the Backyard-Newcoast system (MINFILE 104P 016), was delineated beneath an argillite cap and returned up to 7.3 g/t gold over 2.25 m. A quartz stringer zone on strike with the Oro vein returned 1.04 g/t gold over 28.35 m.

Columbia Yukon Resources Inc. acquired the **Storie** molybdenum deposit (MINFILE 104P 069) near Cassiar and completed 5000 metres of drilling in 20 holes, as a first step toward validating historic work. In 1981 Shell Canada Resources Inc. calculated a resource of 100.5 million tonnes containing 0.077% molybdenum. Quartz-molybdenite veins occur in coarse-grained granite near the border of the Cassiar batholith and form a flat, 150-200 metre thick zone lying within and extending outward from the Crone fault (Figure 2.11). The first drillhole returned 0.080% molybdenum over 165 metres.

TURNAGAIN-UPPER STIKINE AREA

Hard Creek Nickel Corporation continued exploration for a bulk-tonnage nickel deposit on the **Turnagain** property, 70 kilometres east of Dease Lake. The Turnagain serpentinized ultramafic body contains zones of disseminated, net-textured pyrrhotite with minor pentlandite and rare chalcopyrite. Prior to the field program, the company announced the Horsetrail zone (MINFILE 104I 119) contains a measured and indicated resource of 105.7 million tonnes grading 0.21% nickel contained in sulphide minerals. Sulphide nickel grades are based on selective leach analyses that constitute 60-90% of the total nickel determined by the standard analytic method and correlate with recoveries in metallurgical testwork. The 2006 program comprised 68 drillholes totaling 19 122 metres and focused on identification of near surface areas with greater than 0.3% nickel to expand the resource, and evaluation of platinum and palladium content of the DJ zone located 3 km northwest of the Horsetrail zone.

At the **Eaglehead** porphyry copper prospect (MINFILE 104I 008), Carmax Explorations Ltd. tested IP anomalies up to 1800 m east of previous drilling with 10 drillholes totaling 3076 m (Figure 2.12). Bornite and chalcopyrite veins are associated with potassium feldspar and secondary biotite in non-porphyritic granodiorite. Carmax reported results mainly as copper equivalent grades. For example, hole 69A returned 0.319% copper equivalent over 421 m, which is weighted by a narrow extremely high-grade interval – 0.67 m that graded 21.3% copper, 1.76% molybdenum, 3.98 g/t gold and 138 g/t silver.

Sutcliffe Resources Ltd. completed 10 diamond drillholes on its **Beale Lake** property (MINFILE 104I 098) northeast of Dease Lake. The target was gold veins related to intrusive activity and associated with anomalous arsenic, bismuth and tungsten. The best intercept was 6.58 g/t gold over 0.35 m in hole BL06-09. Two prime targets, the Upper Beale vein and the Yurso vein (MINFILE 104I 121), were not tested by

Figure 2.11. Drill area on the Storie molybdenum property, the Crone fault corresponds to the prominent notch on the skyline.

Figure 2.12. Eaglehead exploration camp.

drilling due to logistical problems associated with winter conditions.

Arcus Development Group Inc. drilled a porphyry copper-gold target (MINFILE 94E 028) on the **Williams** property located 140 km east of Dease Lake with a five-hole program. Drilling tested IP and soil geochemical anomalies. Pyrite, minor chalcopyrite, molybdenite, magnetite and specularite were encountered in monzonite and sericite-altered Takla Group volcanic rocks north of a major east-trending fault.

TELEGRAPH CREEK AREA

At **Mess Creek** (MINFILE 104G 040), south of Schaft Creek, Paget Resources cored 4 diamond-drill holes to test chalcopyrite-bornite showings and associated copper soil anomalies. Alkalic intrusive rocks, syenite to monzonite, are emplaced on a north-south structure on the east margin of the Hickman batholith. Pervasive hematite and magnetite are associated with copper mineralization.

At **Copper Creek**, Firesteel Resources Inc. completed 1700 lineal metres of trenching to explore the extent of the supergene zone on the DK porphyry copper prospect (104J 035). Trench 2006-01 returned 0.24% copper and 0.26 g/t gold over 279 m (Figure 2.13). Monzonite, probably an apophysis of the Kaketsa pluton, intrudes mafic volcanic rocks and bedded tuffs of the Stuhini Group. Quartz stockwork, with chalcopyrite more abundant than pyrite, is developed across the intensely fractured intrusive contact over a 700 m distance. Secondary copper minerals (malachite, azurite and sooty chalcocite) predominate in the upper 30-60 metres from the surface. An access trail to the Pyrrhotite Creek zone (MINFILE 104J 018) was re-opened to facilitate exploration in 2007. The property is 50 km northwest of Telegraph Creek and 8 km from the Golden Bear mine road.

Figure 2.13. Trench sampling at Copper Creek.

Forty-five kilometres west of Telegraph Creek, St. Eugene Mining Corporation conducted geological mapping and hand-trenching on the **Poker** property (MINFILE 104G 149) aimed at locating the unexposed source of gold-bearing quartz-sulphide boulders near the retreating margin of the Limpoke glacier.

KINASKAN AREA

The highlights of Canadian Gold Hunter Corp. 62 hole (18 230 m) drilling program on the **GJ** property are delineation of shallow high grade copper-gold mineralization in the Donnelly zone (MINFILE 104G 086) and discovery of the Donnelly North zone. Porphyry copper-gold mineralization is related to the poorly exposed Groat monzonite stock, located 25 km southwest of Iskut. In the Donnelly zone, hole CGH06-128 intersected 1.49% copper and 1.80 g/t gold over 39.3 m from the sub-crop surface. Material often grading more than 0.5% copper and 0.5 g/t gold is thought to occur over a 30-100 m width and extend over the 1500 m length of the Donnelly zone. An independent resource estimate prior to the 2006 program determined an inferred resource of 28 million tonnes grading 0.354% copper and 0.369 g/t gold and an indicated resource of 91.7 million tonnes grading 0.373% copper and 0.381 g/t gold, both at a 0.2% copper cut-off. Hole CGH06-099 in the Donnelly North zone intersected 189 m grading 0.22% copper and 0.42 g/t gold. Other intercepts are lower grade but the zone is open for exploration to the east and west.

ISKUT DISTRICT

Seabridge Gold Inc. followed up 2005 exploration by Falconbridge Limited for a bulk-tonnage gold-copper deposit on the **Kerr-Sulphurets** property, 40 km north of Stewart. Twenty-four holes were completed in the Mitchell zone, on a 200 m grid, and five targeted extension of the Sulphurets gold zone for a total of 9100 metres. Both zones comprise a deformed quartz stockwork (Figure 2.14) in strongly foliated rocks in the footwall of the closely paired Mitchell and Sulphurets thrust faults. The Mitchell zone (MINFILE 104B 176, 275) is 800 m wide and 2000 m long with the western limit covered by talus and the eastern limit covered by the Mitchell glacier. True thickness is at least 300-400 m as many holes are uniformly mineralized over their full depth. Results from 10 of the first 15 holes show consistent grade of approximately 0.8 g/t gold and 0.15% copper. These dimensions and grade indicate a very large gold resource potential on the property, augmented by historic resources in the Kerr (141 million tonnes grading 0.75% copper and 0.36 g/t gold) and Sulphurets (54.8 million tonnes grading 1.02 g/t gold) deposits. Rugged topography with ice-capped ridges and glacier-filled valleys are challenges to resource development. The Mitchell glacier has receded

Figure 2.14. Intense quartz stockwork in drill core from the Mitchell zone, Kerr-Sulphurets property.

1 km since 1992 and reduced 100 m in height (M. Savell, personal communication).

Silver Standard Resources Inc. reactivated exploration of the **Snowfields** gold prospect (MINFILE 104B 179). The Snowfields zone is 2 km southeast of the Mitchell zone (see above) and also in the footwall of the Sulphurets thrust fault. Gold is associated with pyrite and molybdenite in quartz veinlets in quartz-sericite schist, which are likely derived from intermediate volcanic rocks. Drilling of 27 core holes (6141 m) over an area of 450 by 300 metres delineated a flat lying gold-bearing zone that averages 150 m thick. The gold intercepts demonstrate a high level of consistency between holes, all but three returned from 1.0 to 2.0 g/t gold over lengths of 100 to 250 m. Measured plus indicated resources were calculated at 49.4 million tonnes at a grade of 1.48 g/t gold and 0.012% molybdenum, at a cut-off of 0.05 g/t gold, with a further 14.7 million tonnes of Inferred resource at a slightly lower grade.

On the **Corey** property, Kenrich-Eskay Mining Corporation a 1000 square km airborne EM survey identified new geophysical targets in the Salmon River rhyolite and mudstone sequence to explore for a gold and silver-rich volcanogenic massive sulphide deposit.

Fifty-four drillholes recovered nearly 13 000 metres of core. Work focused on the C-10 zone (MINFILE 104B 355) where sericite alteration and stockwork veining is interpreted to be a footwall feeder zone to a massive sulphide deposit. Geochemically anomalous base and precious metals were reported over intervals of up to 20 m. Prospecting on the TM (MINFILE 104B 354) and GFJ (MINFILE 104B 233) prospects identified targets for further work in 2007.

Paget Resources Corporation, a private company, acquired the **Ball Creek** porphyry copper prospect developed in a quartz monzonite stock northwest of Bob Quinn. One hole was drilled into the Mary zone (MINFILE 104G 018) and another into the Cliff zone (MINFILE 104G 042). Two holes in the previously untested DM zone, near the north end of the stock, intersected a quartz stockwork with chalcopyrite and pyrite that assayed 0.21% copper and 0.29 g/t gold over 219.6 m (J. Bradford, personal communication). Prospecting on the Rainbow epithermal system located 5 km west of Ball Creek identified silicified Stuhini Group limestone containing up to 11 g/t gold in grab samples.

Strong gold and molybdenum soil anomalies on the **Voigtberg** property (MINFILE 104G 146) located 140 km northwest of Stewart were explored by BC Gold Corporation and Kaminak Gold Corporation. Extensive hydrothermal alteration is developed in Stuhini Group volcanic and sedimentary rocks in proximity to feldspar porphyry intrusions (Figure 2.15). A drillhole in the core of a 700 by 400 metre gold in soil anomaly intersected 1.03 g/t gold over 51.1 m. A hole outside the gold anomaly cut 22.5 metres grading 1.02% zinc. Follow-up of a molybdenum soil anomaly led to discovery of disseminated molybdenite but a drillhole beneath the outcrop did not intersect significant mineralization.

At the **RDN** property, Equity Engineering conducted a four-hole drill program on behalf of Northgate Minerals Corporation. The property (MINFILE 104G 144) is located 40 km north of the Eskay Creek mine. The holes cored mudstone and rhyolite breccia that are correlative with Eskay Creek strata. No results were released.

Skyline Gold Corporation resumed work on the **Bronson Slope** gold-copper porphyry deposit (MINFILE 104B 077) adjacent to the reclaimed Snip gold mine. A historic resource of 67 million tonnes grading 0.53 g/t gold and 0.20% copper must be brought into compliance with current standards. Only 700 m of a planned 4700 m in-fill drilling program was completed, owing to winter conditions and inability of the drill to core the hard quartz-magnetite rock in the mineralized zone. Pyrite, chalcopyrite and specularite occur in a quartz-magnetite replacement and stockwork zone at the

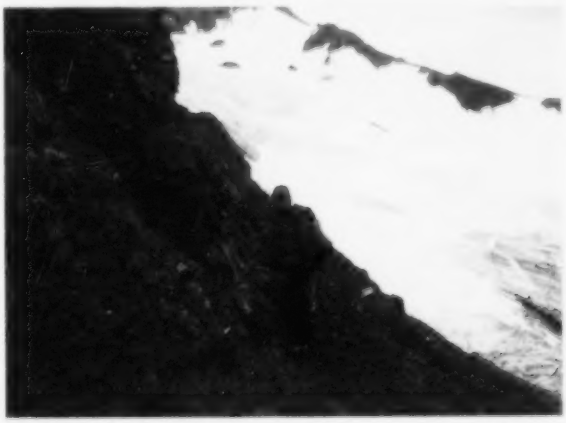

Figure 2.15. Adam Simmons mapping an outcrop within the gold geochemical anomaly at Voigtberg.

top of the Red Bluff K-feldspar porphyry syenite stock.

Newcastle Minerals Ltd. drilled five core holes on its **Snip North** property, 3 km north from the closed Snip gold mine. Disseminations and stringer veins of pyrite, chalcopyrite and molybdenite occur near the margin of a sub-alkalic intrusion (MINFILE 104B 089).

At **Newmont Lake**, 30 km southeast of Galore Creek, Romios Gold Resources Inc. conducted a drilling program to test an IP anomaly 600 metre northwest of the McClymont zone (MINFILE 104B 281). Andesite and thin-bedded turbidite beds were intersected; no mineralization was reported by the company.

On the **Pore** claims south of Galore Creek, Romios Gold Resources Inc. traced a quartz vein, locally six metres wide, over a distance of 400 metres by prospecting and geological mapping. The vein contains minor base metal sulphides and anomalous levels of gold and silver. A coincident silver geochemical soil was delineated that extends the possible length of the vein to 1200 m. The property is underlain by Paleozoic felsic volcanic rocks that contain chalcopyrite-bearing sulphide lenses and stringers.

Spirit Bear Minerals Ltd. evaluated gold targets on the **Iskut River** property that includes the former Johnny Mountain mine, with a program of geological mapping, geochemical sampling and prospecting. Drilling was postponed until 2007.

STEWART NORTH TO GRANDUC

Bell Resources Corporation continued to drill the southern extension of the **Granduc** deposit (MINFILE 104B 021), 40 km north of Stewart. Granduc is a volcanogenic massive sulphide deposit with a total mineral inventory of 29.03 million tonnes grading 1.83% copper, which includes 15.4 million tonnes of production (Bell Resources website). The copper deposit is part of a sulphide facies banded iron formation that occurs near the top of the Hazelton Group at the stratigraphic contact between mafic pillow lava and tuff with overlying sedimentary rocks that include chert, argillite and tuff. The 2006 program extended the mineral horizon 770 metres with four holes intersecting, on average, 2.0% copper over true widths of 3-6 metres (Figure 2.16). Two holes deviated off-target and another that targeted a magnetic anomaly intersected gabbro rich in magnetite. Prospecting led to discovery of magnetite iron formation with minor chalcopyrite in the JK zone north of the Granduc deposit.

Tenajon Resources Corporation undertook surface and underground diamond drilling at the closed **Summit Lake** gold mine (MINFILE 104B 034). Gold occurs in a series of en echelon quartz-pyrrhotite-pyrite-calcite veins near the margin of the Summit Lake granodiorite stock. An underground drift on the 3000 level was advanced 100 m and 17 holes were collared

Figure 2.16. Drilling at Granduc, workings of the former copper mine underlie the mountain in the background.

underground to explore the M zone northwest of where it was stoped. Two holes explored the M zone to the east, six holes tested the L zone and one targeted the N zone. Results from the L zone were disappointing, returning low gold grade over narrow intervals. Gold assays from the M zone were generally low grade, though one highlight drillhole returned 11.3 g/t gold across a true thickness of 1.40 m. A new zone of gold-bearing quartz-sulphide veining, named the R zone, was intersected 100 m south of the M zone. Surface drilling tested the Blueberry vein (MINFILE 104B 133) along strike north and down-dip of a 2005 drillhole that returned 21.3 g/t gold over 4.97 m. The Summit Lake mine closed in 1984 due to high maintenance cost associated with the access road following closure of the nearby Granduc copper mine. It produced 183 000 tonnes of ore at an average grade of 16.2 g/t gold and, at shutdown, geological resources were estimated at 120 000 tonnes at an average grade of 19.1 g/t gold (prior to NI 43-101).

The **Electrum** property of American Creek Resources Ltd. covers the former East Gold mine (MINFILE 104B 033), a small producer of gold from a very rich vein of electrum. The deposit occurs within an extensive quartz-sericite-pyrite alteration zone on the margin of the Summit Lake stock that includes the Tide property (*EMBC — 2004, p. 31-32*). American Creek conducted a program of soil geochemistry, ground geophysics and diamond drilling of 21 holes (2797 m). Highlights from the first ten holes include 10.5 g/t gold, 89.7 g/t silver and 5.34% zinc over 1.4 m and 2.98 g/t gold and 501 g/t silver over 0.6 m. The second phase of drilling continued to test gold-bearing quartz-sulphide veins but results were not available.

Pinnacle Mines Ltd., under an agreement with Mountain Boy Minerals Ltd, continued to drill on the **Silver Coin** property (also known as Silver Butte, MINFILE 104B 150) located 24 km northwest of Stewart. In total, 115 holes (24 000 m) was completed. The property includes the Kansas claim that was

acquired from Tenajon Resources Corp. Based on work to the end of 2005, MineFill Services calculated an inferred resource of 11.3 million tonnes grading 1.60 g/t gold, 6.64 g/t silver and 0.41% zinc without using a cut-off grade. Drilling in 2006 (Figure 2.17) focused outside this resource and returned sporadic high grade gold. Previous operators identified five irregular vein-stockwork and breccia zones on the property that contain gold, silver and base metals. Mining in the 35 zone by Westmin Resources Ltd. in 1991 produced 105 000 tonnes of ore grading 7.86 g/t gold and 23.4 g/t silver. In 1995 (prior to NI 43-101) Westmin calculated resources in the Kansas/West Kansas (KWK) zone to be 1 774 000 tonnes grading 2.20 g/t gold based on drilling, underground development and three bulk samples.

Pinnacle Mines Ltd. and Mountain Boy Minerals Ltd. completed 14 drillholes from 3 sites to test a newly-discovered lead-zinc-silver showing on the **Barbara** property. The claims are located south of Bear Pass and 30 km from Stewart. Mineralization appears to be stratabound within chert and siltstone that overlies massive dacite (D. Alldrick, personal communication, 2006). The best drillhole intersected 4.67% lead, 4.05% zinc and 152 g/t silver over a true thickness of 6-7 metres. Pinnacle and Mountain Boy also cored 15 holes (1300 m) on the **FR** claims, 20 kilometres to the north, which returned a best intercept of 231 g/t silver across 3 m.

Goldeye Explorations Ltd. and Polar Explorations Ltd. tested the northern extension of a gold-bearing quartz breccia vein, the South zone, with eight drillholes on the **Todd Creek** property (MINFILE 104A 001). Gold is associated with chalcopyrite, specularite and barite. Five holes targeted the Mext zone and three tested Fall Creek East (MINFILE 104A 007) but no results were released.

A diamond-drilling program was carried out on the **Poly** claims, 42 kilometres northeast of Stewart, by Lateegra Resources Corp. and Cypress Development Corp. Seven holes totaling 908 metres tested a series of gold and silver-bearing veins, associated base metal sulphides and related IP anomalies. No significant assays were reported.

Figure 2.17. Drilling at Silver Coin, overlooking Granduc road and Salmon glacier.

STEWART SOUTH TO ALICE ARM

Sabina Silver Corporation drilled the K-LG vein on the **Del Norte** property 34 km east of Stewart. About 3000 metres of drilling was completed on the narrow, discontinuous gold-silver veins (MINFILE 104A 161). Geological mapping determined that EM anomalies are derived from graphite in argillaceous sedimentary rocks and from glacier margins (T. Baressi, personal communication, 2006).

Canasia Industries Ltd. completed 7 drillholes southeast of Stewart on the **Clone** gold prospect (MINFILE 103P 251) previously explored by Teuton Resources Corporation and described in *EMBC – 1996, page B-9*. The holes were within the known extent of the paired, 2-4 metre-wide; hematite and sulphide shear zones and returned grades ranging from 4-25 g/t gold.

Tenajon Resources Corporation explored for a high grade molybdenum deposit with a deep drilling program on the **Ajax** prospect (MINFILE 103P 223). Ajax is 14 km north of Alice Arm town site in the Kitsault valley. It was explored in 1965-1967 by 8100 metres of A-size core that was used to derive a resource estimate of 175 million tonnes grading 0.074% Mo. The 2006 program encountered technical difficulties and completed less drilling than planned. Five holes extended the mineralized zone 100 to 300 metre below historic drilling and Tenajon will prepare a new resource estimate.

Kenrich-Eskay Mining Corporation flew a 1000 line-kilometre EM and magnetic survey in search of new copper massive sulphide deposits on its Coastal Copper property in the **Anyox** district. Diamond drilling (54 holes, 13 000 m) focused on the **Double Ed** deposit (MINFILE 103P 025) and also tested EM anomalies north of the Hidden Creek and Redwing deposits. At Double Ed, Cominco Ltd between 1952 and 1960 delineated a resource of 2 million tonnes grading 1.3% copper, 0.6% zinc and, from incomplete data, about 60 g/t silver. The vertically dipping, pyrite and pyrrhotite-rich zone consists of two stacked lenses (or one folded body) and measures 150 metre in length by 300 metres downdip, with a true thickness of 2-15 metres. The deposit lies near the top of a pillow basalt sequence several hundred metres stratigraphically below Salmon River Formation argillite. The objective of the drill program was to establish a NI 43-101 compliant resource at Double Ed and to test for extensions to the deposit. Initial drill intercepts show strong zoning of copper and zinc grade. For example, hole DE06-02 intersected 2.20% copper and 0.37% zinc over 11.9 m (upper horizon, true thickness) and hole DE06-23

intersected 0.38% copper and 5.51% zinc over 8.0 m (also upper horizon, true thickness).

Bravo Venture Group Inc. returned to the **Homestake Ridge** gold-silver prospect (MINFILE 103P 216) 35 km southeast of Stewart to complete 6532 metres of drilling in 28 holes. Significant gold values were intersected. Mineralization occurs as a quartz-chalcopyrite vein and breccia zone that is interpreted to lie in a consistent stratigraphic interval between massive andesite and an overlying debris flow consisting of diverse volcanic clasts in a greywacke matrix. Drilling focused along a 300-metre strike length with the highest grade gold intersections occurring 250 m below historic trenches and open cuts (Figure 2.18). Hole HR06-24 intersected 14.8 metres grading 15.7 g/t gold and hole HR06-27 cut 8.5 metres grading 25.3 g/t gold. True thickness of these intercepts, located 70 m apart, is unknown. Subsequent holes extended the zone but returned lower gold grade assays. More drilling is planned in 2007.

Immediately west of Homestake Ridge, Teuton Resources drilled 7 holes (1372 m) on the **Tonga** property to test gold and silver geochemical anomalies. The holes cored black mudstone and argillite. A gold and silver-bearing quartz vein occurs nearby (MINFILE 103P 156).

TERRACE-PRINCE RUPERT AREA

Trade Wind Ventures Inc. explored the **Treasure Mountain** property (MINFILE 103I 090) located, 35 km east of Terrace. Disseminated and fracture controlled bornite and chalcocite occur in maroon andesite breccia of the Hazelton Group. Similar mineralization occurs over a 5 km strike length in the north-striking, east-dipping maroon and green volcanic strata. Work comprised improvement to an access trail from the Copper River, geological mapping and sampling.

Figure 2.18. Marcus Vanwermeskerken leads a tour of old rock trenches at Homestake Ridge.

BCM Resources Ltd. intersected 0.118% molybdenum over 59.65 metres in its first drillhole on the **Shan** property (MINFILE 103I 114) 20 km northeast of Terrace. The program was increased and 20 holes were completed. Drilling nearby in 1969 by Kokanee Moly Mines Ltd. also intersected significant mineralization, including 0.131% Mo over 15 m. A soil survey in 1971 enlarged the area of interest to 800 m by 500 m area but was not investigated until 2006. Mapping and sampling by BCM identified new surface showings in the northeast part of the soil anomaly and guided the BCM drilling program. Molybdenite occurs in quartz-pyrite veins in equigranular granodiorite and in adjacent Hazelton Group volcanic rocks. In drill core (Figure 2.19), molybdenite occurs with magnetite, specularite and minor sphalerite and chalcopyrite. Six holes were completed at **Molybdenum Creek** (MINFILE 103I 016) earlier in the year but no significant molybdenum was intersected.

Jet Gold Corp. began a trenching and geological program on the Cretaceous-age **Naskeena** coal deposit (MINFILE 103I 002) located 50 km north of Terrace but work was curtailed by heavy snowfall in November. Three new coal occurrences were found 4-5 km to the north, northwest and southeast of the known locality. Further work is planned.

Cross Lake Minerals Ltd. began a deep drill program late in the year at the past-producing gold mine on **Porcher Island** (MINFILE 103J 017), located 35 km southwest of Prince Rupert. Intrusion-hosted quartz veins are rarely more than 120 m long but are gold bearing to more than 400 metres below surface.

SMITHERS-HAZELTON AREA

Exploration of the **Big Onion** porphyry copper prospect (MINFILE 93L 124) east of Smithers was reactivated by Eagle Peak Resources, a private company. Mineralization is developed in a composite

Figure 2.19. Margaret Venables inspects granodiorite core for molybdenite at Shan.

quartz diorite and quartz-feldspar porphyry intrusion. In 1977 a resource of 94 million tonnes grading 0.42% copper was calculated by Canadian Superior Explorations Ltd. In the current program eleven previous holes were twinned with the aim to calculate a 43-101 compliant resource (Figure 2.20). Eight of the holes returned better than historic intercepts (L. Tattersall, personal communication).

The **BQ** property located 50 km northwest of Smithers contains newly recognized epithermal gold mineralization that was explored by Endurance Gold Corp. Coincident anomalies in IP chargeability and gold-silver-zinc-arsenic in soil were tested by 11 core holes (2017 m). The property is underlain by gently, north dipping felsic volcanic tuff and breccia intercalated with fossiliferous sandstone and mudstone, which are cut by dikes of quartz-feldspar porphyry. Mineralization occurs as stringer veins and disseminations of pyrite, arsenopyrite, pyrrhotite, sphalerite and chalcopyrite. Gold is most closely associated with arsenopyrite. Locally, bivalve fossils are replaced by pyrite, pyrrhotite and sphalerite. A broad zone of pervasive sericite-quartz-carbonate-clay alteration surrounds the 400 metre-long mineralized zone. Hole BQ-03 intersected 33 metres grading 0.77 g/t gold and hole BQ-07 intersected 2.1 metres grading 3.47 g/t gold and 2.64% zinc.

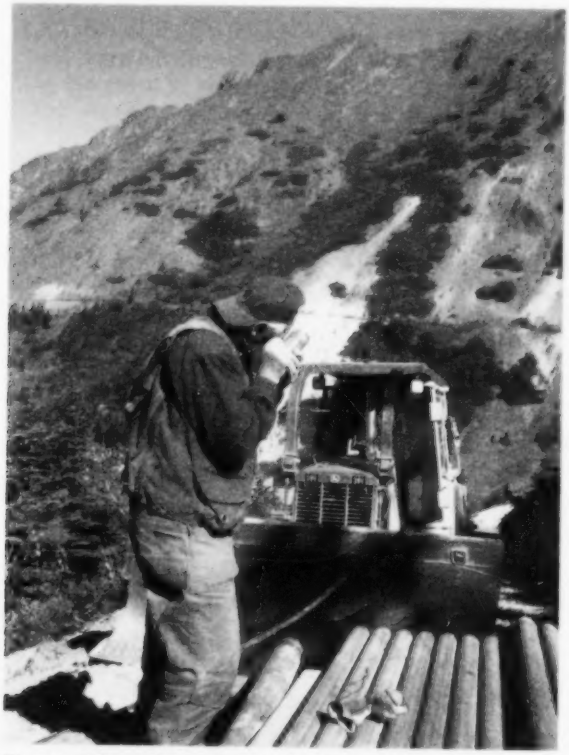

Figure 2.20. Lloyd Tattersall inspects new core for chalcopyrite at Big Onion.

North American Gem Inc. continued to drill the **Louise Lake** copper-gold porphyry prospect (MINFILE 93L 079), completing 12 core holes (3387 m) that expanded the a tabular, gently dipping mineral zone along strike and down-dip. The property has been explored by 25 holes drilled in 2004-2006 and 34 holes between 1970 and 1992. The deposit is 170 m thick and has a strike length of 950 m. An independent study determined an indicated resource of 6 million tonnes grading 0.214% copper, 0.006% molybdenum and 0.20 g/t gold and an inferred resource of 141 million tonnes grading 0.234% copper, 0.009% molybdenum and 0.23 g/t gold. A metallurgical study determined that copper occurs as chalcopyrite and enargite, not tennantite as previously reported, which would result in a high-arsenic concentrate. In-fill drilling is scheduled to re-commence in early 2007.

Dentonia Resources Ltd. completed three of five planned core holes on the **Thomlinson Creek** molybdenum prospect (MINFILE 93M 122) located 42 km northeast of Hazelton. Dentonia reported intersecting molybdenite in biotite granodiorite and particularly near the contact with hornfelsed sedimentary rocks; results were not available yet. Drilling in 1981 failed to account for a strong 5-kilometre long molybdenum soil anomaly although one hole returned 0.236% molybdenum and 0.17% copper from the bottom 6 metres of core.

Endurance Gold acquired the **Virginia Silver** (MINFILE 93M 021) property from David Hayward; it is 30 km northwest of Smithers. After surface sampling confirmed the tenor of the silver vein, Endurance Gold drilled five holes to test its southwest extension. The gently dipping, fault-controlled vein comprises quartz and ankerite with base metal and silver-bearing sulphide minerals. Underground sampling by Silver Standard Mines in 1968-1969 determined an average grade of 2950 g/t silver across a width of 0.5 to 2 metres. The vein lies within folded Skeena Group sandstone and is associated with a latite dike. Results of drilling were not available.

BABINE AREA

Exploration of the **Fireweed** silver-lead-zinc prospect (MINFILE 93M 151) was conducted by Jantar Resources Ltd. The property is near Babine Lake, 50 km northeast of Smithers. Fireweed is a massive and disseminated sulphide deposit that is stratabound within Skeena Group sedimentary rocks and associated with rhyolite dikes and sills. An historic resource is not compliant with NI 43-101; 580 000 tonnes grading 342 g/t silver, 1.34% lead and 2.22% zinc across an average width of 4.75 metres. Jantar completed 5 core drillholes that totaled 937 m.

Near French Peak located 65 km northeast of Smithers, Grizzly Diamonds Ltd. explored the Ute and Rio silver-gold-copper-lead-zinc veins on the **Peak**

claims (MINFILE 93M 015) with a 1445 m diamond drilling program. Seven holes on the Ute vein and its western extension determined that sulphide veining is associated with an east-trending fault. Drillhole PK06-02 intersected 340 g/t silver and 1.91% copper across 2.1 m. At the Rio vein, surface exposures and four drillholes show pyrite-chalcopyrite veins are associated with a zone of semi-massive sulphide and siliceous replacement that is conformable within felsic tuff. The volcanic host rocks are correlated with the Cretaceous Rocky Ridge Formation.

Bard Ventures Ltd. acquired the Lone Pine claims located 35 km south of Smithers from Daniel and William Merkley. Several molybdenum showings on the property (MINFILE 93L 027, 028) were assessed by a three-dimensional IP survey in anticipation of a diamond drilling program.

HOUSTON-TAHTSA AREA

New Cantech Ventures Inc. carried out a 5600 metre in-fill drilling program on the **Lucky Ship** molybdenum prospect (MINFILE 93L 053), located near the Nanika River 65 km southwest of Houston. Broadly positive results from the drill program (Figure 2.21) led to a substantial increase in the indicated resource which now stands at 29.1 million tonnes grading 0.090% molybdenum at a cut-off grade of 0.06%. Mineralization is associated with a 150-metre diameter granite plug that is within a larger, irregularly shaped body of quartz-feldspar porphyritic rhyolite. A high silica zone and an outer molybdenum zone occur as concentric shells surrounding the granite plug. In plan-view, the molybdenum zone is about 35 metres wide and the shape of a donut. At the time of writing this report, an exploration hole was in progress to test for a deep molybdenum deposit up to 1100 m below surface. Late in 2006, New Cantech struck an agreement with Palm Clean Energy Inc. of Korea which will finance on-going exploration and development through to production in exchange for a 60% interest in the project.

At the **Seel** property (MINFILE 93E 105), Gold Reach Resources Ltd. completed 10 drillholes in January and 15 more holes in October 2006 for a total of 6046 metres. The claims are 110 km south of Houston, and just 7 km from the Huckleberry copper mine. Porphyry copper mineralization is developed in a medium grained Bulkley granodiorite stock about 1 km long by 500 m wide, elongate to the northeast. Hole S06-24, the best hole of the first program, intersected 0.35% copper and 0.38 g/t gold over 113.5 metres (Figure 2.22). In the second program, six holes penetrated a previously-known breccia zone. An exceptional hole in a variably mineralized breccia returned 0.845% copper and 23 g/t silver over 138 m. Gold Reach reported the breccia contains intrusive and hornfelsed volcanic fragments surrounded by

Figure 2.21. A diamond drill mounted on dozer at Lucky Ship.

Figure 2.22. Cutting drill core with a diamond saw at the Seel property.

pyrite-marcasite, chalcopyrite, sphalerite, tetrahedrite, quartz and siderite.

Callinan Mines Limited explored the **Coles Creek** porphyry copper prospect (MINFILE 93E 042) with a 5000 metre drilling program. Eight holes tested IP and soil geochemical targets and intersected hornfelsed volcanic rocks and granodiorite locally containing disseminated and fracture-controlled chalcopyrite. In drill core, gypsum-healed fractures are common and a strongly broken zone that extends up to 100 m from surface may result from gypsum dissolution. Anhydrite

occurs locally below 100 m with pyrite and chalcopyrite. Outcrop in a canyon along Coles Creek shows malachite is developed at a depth of 30 m below surface. Results of drilling were not available.

Torch River Resources Ltd. completed 7 core holes (2134 m) to extend mineralized zones on the **Red Bird** molybdenum property located 125 km south of Houston (MINFILE 93E 026). The holes were distributed among three zones which are located around the margin of a quartz monzonite stock and returned up to 0.094% molybdenum over 205 m. An inferred resource of 75 million tonnes grading 0.065% molybdenum was calculated in 2006 from historic drilling.

Manson Creek Resources drilled a single 254-metre core hole on the **Palomino** (MINFILE 93L 019) claims to evaluate a magnetic anomaly in an area with potential for porphyry copper mineralization. A feldspar-quartz porphyry dike was encountered, similar to other bodies on the property that contain sparse disseminated chalcopyrite.

COAL EXPLORATION

West Hawk Development Corporation was disappointed with results of 15 reverse circulation holes in the **Coal Creek** thermal coal deposit (MINFILE 93L 147), located 40 km west of Smithers. No further information was released and the property was returned to the vendor. Coal is contained in the Lower Cretaceous Skeena Group which hosts significant coal resources near Telkwa.

EXPLORATION FOR INDUSTRIAL MINERALS AND GEMSTONES

Ascot Resources Ltd. received project approval from the Environmental Assessment Office and, in October, began construction of the **Swamp Point** aggregate mine. Swamp Point (MINFILE 103O 017) is located on the Portland Canal, 50 km south of Stewart. Initial deliveries of crushed and screened material will be made by barge to Prince Rupert for the port expansion project. The company has targeted the export market for the majority of its production.

Arthon Construction Ltd. proposes to develop a large gravel operation on the Sandhill property near the port of Kitimat, for barge or ship loading to local and off-shore markets.

A private company, 24/7 Timber Limited, began site work on a granite rock quarry at **Tyee**, 25 km east of Prince Rupert on the Skeena River. Rock from the Ecstall hornblende quartz diorite pluton would be used as ballast for harbour protection and in high-strength asphalt required for the port expansion in Prince Rupert.

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NORTHEAST REGION

By Bob Lane, PGeo
Regional Geologist, Prince George

SUMMARY AND TRENDS

Exploration and mining activity in the Northeast Region continued at a robust level throughout 2006. The highlights for the year were the commissioning of two new coal mines. The Trend coal mine of NEMI Northern Energy and Mining Inc opened in January followed by the Wolverine coal mine of Western Canadian Coal Corp in July. The Dillon mine exhausted its reserves, but operator Western Canadian Coal Corp plans to use the mine infrastructure to exploit the adjacent Brule deposit which has an Environmental Assessment certificate. At the Willow Creek mine, rising mining costs and weakening coal prices forced owner Pine Valley Coal Corp to suspend operations indefinitely.

NEMI Northern Energy and Mining Inc (NEMI) applied for approvals to significantly increase production at its Trend coking coal mine. Four other coal projects, Gething (Canadian Dehua International Mines Group Inc), Hermann (Western Canadian Coal Corp), Horizon (Hillsborough Resources Limited) and Wapiti (as part of the AESWapiti Energy Corporation power project) entered the pre-application phase of the Environmental Assessment process.

Late in the year the northeast British Columbia coking coal assets of Anglo Coal Canada Inc (a subsidiary of the international mining conglomerate Anglo American PLC), NEMI and Hillsborough Resources were consolidated into a new limited partnership called the Peace River Coal Limited Partnership (PRCLP). Under the arrangement Anglo Coal Canada received a 60% interest in the PRCLP, and NEMI and Hillsborough Resources each received a 20% interest. The operating entity for the PRCLP is Peace River Coal Inc.

Exploration spending decreased to an estimated $20 million (compared to $27.1 million in 2005) and exploration drilling dropped to approximately 66 000 metres (compared to 94 000 metres in 2005) from the totals accrued in 2005, but remained well above the ten-year average. A modest decline in demand for metallurgical coal resulted in a drop in prices which played a part in tempering exploration enthusiasm. One of the more encouraging aspects of the 2007 exploration projects was a renewed interest in coal seams in the Gething Formation and Minnes Group.

The advanced exploration projects in the Peace River Coal Fields included: Belcourt-Saxon, Burnt River (Dillon and Blind), Goodrich-Central South, Hermann, Horizon-North Ridge and Horizon-Waterfall, Quintette-Babcock Mountain, South Cirque, South Ridge, Trend-Roman Mountain, Wapiti and Wolverine-Perry Creek. Other major projects include Hudson's Hope, Murray River, Reesor, Sukunka, Table and Tentfire / Prospect. The majority of these projects evaluated coking coal deposits.

The lone metal exploration program of significance was the **Trident** copper project located west of Fort Nelson. Sand and gravel and aggregate deposits are important in the Northeast Region, primarily for building roads and construction of buildings; however, they are not addressed in this report.

Locations for mines, developments and exploration projects are shown on Figure 3.1.

COAL MINES

The **Willow Creek** mine operated by Falls Mountain Coal Inc, a 100% owned subsidiary of Pine Valley Mining Corp, endured a tough year. As PCI and coking coal prices fell, the mine's production costs rose and plant yield dropped from 75% to 50-60%. Ultimately, the company suspended mining operations in October due to economic difficulties and the parent company, together with its subsidiaries, was granted creditor protection under the *Companies' Creditors Arrangement Act*.

Coking coal was mined from the 4 Pit and PCI coal was mined primarily from the 7C Pit (Figure 3.2). Coal production at Willow Creek for the first 9 months of 2006 totaled 202 129 tonnes of clean PCI coal and 147 769 tonnes of clean coking coal. Forecast production for each of the four coal mines is presented in Table 3.1. In-place coal reserves totaled 12.62 million tonnes as of March 30, 2006. Prior to closure, minesite improvements included upgrading of haul and mine access roads and expanded sediment control structures. It is anticipated that Pine Valley Mining will move forward by restructuring the company or will sell the Willow Creek mine.

Reserves at the small **Dillon** mine of Western Canadian Coal Corp, located 55 kilometres southwest of Chetwynd, were mined to exhaustion by September, 2006. Careful mining techniques pulled coal from the Lower and Upper seams in the Gething Formation (Figure 3.3) and produced a raw, low-ash coal product that met contract specifications. The deposit contained 1.37 million tonnes of PCI coal at start-up in December, 2004. Total production for the year was approximately 500 000 tonnes of PCI coal.

Figure 3.1. Operating mines, development projects and major exploration projects, Northeast Region, 2006.

TABLE 3.1. FORECAST MINE PRODUCTION, NORTHEAST REGION, 2006

Mine	Operator	Deposit Type / Commodity	Workforce	Forecast Production (2006); tonnes	Proven and Probable Reserves (effective date)
Dillon	Western Canadian Coal Corp	PCI coal	~80	500 000 t	0
Trend	NEMI Northern Energy & Mining Inc	Coking coal	~60	200 000 t	1.68 million tonnes (saleable tonnes for Trend Small Mine; January, 2006)
Wolverine	Western Canadian Coal Corp	Coking coal	~200	550 000 t	32.73 million tonnes (Perry Creek deposit; January, 2006)
Willow Creek	Falls Mountain Coal Inc (Pine Valley Mining Corp)	PCI coal and coking coal	~60	200 000 t PCI coal 150 000 t Coking coal	12.62 million tonnes (in-place measured and indicated; July, 2005)

The adjacent, and much larger, **Brule** deposit, another Western Canadian Coal Corp project, was granted an Environmental Assessment Certificate in July, 2006. The Gething Formation coal measures are preserved in the Owl syncline. The three seams to be mined, the Lower Seam, Upper Seam and Seam 60, have an aggregate thickness of 12.2 metres. The total measured in-situ resource for the Brule deposit is 36.2 million tonnes. Development of the deposit is expected to commence the first quarter of 2007. The project plans include development of a 2 million tonne per annum (Mtpa) open pit PCI coal mine and a rail loadout located to the north in the Falling Creek Flats area on the CN Rail mainline. Coal from the Brule mine will be trucked to the Bullmoose loadout facility until the Falling Creek Flats loadout, and the development of road access to it, is completed. Capital cost for the project is an estimated $200 million. The mine is expected to employ 250 workers and be in operation for 11 years.

Figure 3.2. Stacker and rail loadout, Willow Creek mine.

The Trend mine of NEMI Northern Energy and Mining Inc (NEMI) was commissioned in January, 2006. The mine is located approximately 25 kilometres south of Tumbler Ridge and about 12 kilometres south of the dormant Quintette mine. The Trend tenures cover coal-bearing stratigraphy of the Gates and Gething formations on the northeast flank of Roman Mountain and Quintette Mountain. A proven and probable reserve of 21.2 million run-of-mine tonnes of medium-volatile bituminous coal is contained in the South and Extension blocks. The initial pit is designed to produce 240 000 tonnes per year by exploiting a coal reserve of 1.68 million tonnes from a narrow, 2.5 kilometre long, trough-shaped pit within the South block. Coal is being mined from five seams in the Gates Formation (D, E, F, G/I and J) that have a cumulative thickness of 15 metres (Figure 3.4). The project includes development of a two-phase open pit mine, construction of a wash plant, development of a dedicated coal loadout facility and laying of approximately 16 kilometres of steel rails to connect the loadout to the Anzac rail line.

Figure 3.3. Dillon pit near end of mine life (photograph courtesy of Bruce Milligan).

Figure 3.4. Production drilling and mining, Trend mine (photograph courtesy of Bruce Milligan).

Clean coal production from start-up to the end of July totaled 160 000 tonnes. Production was limited by the wash plant that performed below expectations. The plant was temporarily shut down in the fall while a coal fines recovery circuit was added at a budgeted cost of $6.5 million. The upgraded plant was re-commissioned in mid-December and is expected to produce an 8.5% to 9.0% ash product at an anticipated yield of 75%. The lower ash product will be more marketable and will command a higher price. Development of the phase 2 pit began in May and mining of coal commenced in September with raw coal being stockpiled for processing in early 2007.

During the year the company applied for approvals to expand the mine and increase production to 2.0 Mtpa. The larger mine would extract coal from both the Gates and Gething formations. Late in the year Peace River Coal Inc became the operator of the mine reflecting the change in majority ownership.

The **Wolverine** mine, of the Western Canadian Coal Corp, is the newest operation in the Northeast Region. Start-up commenced in July, 2006 (Figure 3.5) and the mine is permitted to produce 2.4 million tonnes of clean coking coal per year. The mine is located in the Wolverine Valley about 25 km northwest of Tumbler Ridge and is strategically positioned adjacent to the Tumbler Ridge Branch Line of CN Rail. The coal measures of interest occur within the Lower Cretaceous Gates Formation in a gently southeast plunging open syncline. Four seams (E, F, G and J seams) have a maximum cumulative thickness of about 15 metres and occur over a stratigraphic interval of 90 metres within the Middle Gates member. The coals have a rank of medium-volatile bituminous and are generally categorized as high quality, hard or premium coking coals. The measured plus indicated in-place resources of immediate interest for the E, F, G and J seams at Perry Creek total 32.73 million tonnes. The Perry Creek pit is expected to produce 17.1 million tonnes of run-of-mine coal during its 8-year mine life. The nearby EB pit has received an Environmental Assessment certificate, but has not been advanced to the permitting stage. The company has also proposed to develop the Hermann deposit located south of the Wolverine Valley. Coal from that operation could be trucked to the Wolverine plant site for processing.

Through October, the company had shipped about 189 000 tonnes of hard coking coal from the operation to customers in India, Europe and Asia, and secured contracts for an additional 1.1 million tonnes. The mine employs a workforce of about 200.

COAL EXPLORATION PROJECTS

There were 19 major exploration projects (Table 3.2), some of which were rapidly being advanced to the pre-development or development stage.

Hudson's Hope Area

Kennecott Canada Exploration Ltd completed a single drillhole to investigate the underground coking coal potential of one coal seam on its large **Hudson's Hope** property located northeast of Hudson's Hope.

The **Gething** property, located about 25 kilometres west of Hudson's Hope, was the subject of a thorough literature and data review by Canadian Dehua International Mines Group Inc. The company is a subsidiary of Beijing Shuailing Group, a large international resource company based in China. Various companies drilled 40 bore holes in the Gething Formation of the Lower Cretaceous Bullhead Group in this area between 1971 and 1980. They identified 8 significant coal seams in the upper 150 metres of the formation. The upper two seams of the gently south-dipping succession, Superior and Trojan, collectively average about 2.9 metres in thickness; they are reported to contain an inferred resource of 98 million tonnes of coal. The company has submitted a report to the Environmental Assessment Office that outlines a proposal to develop an underground mine and an onsite preparation plant capable of producing 2 million tonnes of clean metallurgical coal per annum. The proposed operation would employ 400 workers. It is expected that 2007 exploration will comprise confirmatory drilling, required to bring the deposit into the indicated category in compliance with NI 43-101, and an underground bulk sampling program.

Chetwynd – Pine River Area

The private company First Coal Corp conducted major exploration drilling programs on its **Goodrich-Central South** and **South Cirque** coal properties, located south of the Willow Creek mine. The two properties are part of the former Goodrich property explored by Gulf

Figure 3.5. Aerial view of the Wolverine mine.

Canada Resources Inc in the early 1980s. Much of the work completed by First Coal targeted coal measures in the upper Minnes Group (specifically the Bickford Formation or Brenot Formation). These coal measures occur beneath the Gething Formation, the traditional target for coal exploration in the northern Peace River Coal Fields, and are separated from it by the barren Cadomin Formation.

The **Goodrich-Central South** property covers a ridge between Lemoray Creek and Beaudette Creek south of Highway 97. Exploration focused on coal measures in the Gething and underlying Bickford formations. The coal measures were traced by diamond drilling, air rotary drilling and trenching along their northwest strike for about 10 kilometres (Figure 3.6). The coal is reported to be a high-reflectance medium-volatile coking coal. The company proposes to extract a 100 000-tonne bulk sample from the northern end of their tenure in mid-2007. The bulk sample is designed to extract coal from three Gething Formation seams and two Bickford Formation seams, ranging from 1.5 to 3.3 metres thick.

Along trend to the southeast at the **South Cirque** property, First Coal completed a similar-scale project focusing on coal measures within the Brenot Formation. The program was designed to confirm the geological interpretation of Gulf Canada Resources work conducted in the 1980s. The 2006 program identified numerous seams having a cumulative thickness of more than 30 metres; four seams average more than 2 metres thick and many other seams range from 0.9 to 1.1 metres thick. The coal measures are regarded to be high-volatile bituminous and suitable for blending for the coking coal market.

Further to the southeast First Coal completed five diamond-drill holes on its **Table** prospect to evaluate coal measures in the Bickford Formation.

Sukunka River Area

Western Canadian Coal completed three short rotary holes to test for the possible southeast extension of Gething Formation coal measures at the Dillon mine prior to closure. The company also drilled a dozen rotary holes on the Blind deposit (part of the proposed Brule mine development) to assist in geological and deposit modeling.

TABLE 3.2. MAJOR EXPLORATION PROJECTS, NORTHEAST REGION, 2006

Property	Operator	MINFILE (NTS)	Commodity	Deposit Type	Work Program
Belcourt-Saxon	Belcourt Saxon Coal Limited Partnership	093I 014, 016	Coking Coal	Sedimentary	G; GP; RD (430 m); CQ; PF; FS
Burnt River (Dillon & Blind)	Western Canadian Coal Corp	093P 007, 008	PCI Coal	Sedimentary	RD (1510) m; GP; CQ; PF; FS
Goodrich Central-South	First Coal Corporation	093O 034	Coking Coal	Sedimentary	A; G; GP; DD (6500 m); RD (4000); CQ
Hermann	Western Canadian Coal Corp	093I 031	Coking Coal	Sedimentary	RD (2940 m); DD (1575 m); CQ; EN; PF; FS
Horizon (Five Cabin)	Hillsborough Resources Ltd	-	Coking Coal / PCI Coal	Sedimentary	A; G; TR; RD (10 532 m); CQ; EN; PF
Hudson's Hope	Kennecott Canada Exploration Inc	-	Coking Coal	Sedimentary	G; GP; CQ; RD (470 m)
Murray River	Kennecott Canada Exploration Inc	-	Coking Coal	Sedimentary	G; GP; CQ; RT (512 m)
Quintette-Babcock Window	Elk Valley Coal Partnership	093I 011	Coking Coal	Sedimentary	A; G; GP; RC (3262 m); RD (2559 m); CQ
Reesor	Anglo Coal Canada Inc	093P 017	Coking Coal	Sedimentary	A; G; GP; RD (1250 m)
South Cirque	First Coal Corporation	093O 034	Coking Coal	Sedimentary	A; G; GP; DD (4500 m); CQ
South Ridge	Anglo Coal Canada Inc	-	Coking Coal	Sedimentary	A; G; GP; RD (9900 m); DD; CQ
Sukunka	Canadian Dehua International Mines Group Inc	093P 011	Coking Coal	Sedimentary	G; RT (460 m)
Table	First Coal Corporation	-	Coking Coal	Sedimentary	G; GP; DD (1500 m); CQ
Tentfire/Prospect	Anglo Coal Canada Inc	-	Coking Coal	Sedimentary	G; GP; RT (1200 m); CQ
Trend	NEMI Northern Energy & Mining Inc	093I 030	Coking Coal	Sedimentary	A; G; GP; TR; DD (1237 m); RD (4993 m); CQ; EN; PF; R
Trident	Action Minerals Inc / Aries Resource Corp	094K 005, 006, 008, 010, 011, 013, 018, 037, 043, 049, 056, 070, 073, 088	Copper	Mesothermal Vein	G; GC; DD (~2000 m)
Wapiti	Hillsborough Resources Ltd	093P 021	Thermal Coal	Sedimentary	A; G; RD (1622 m); TR; CT; EN; PF
Waterfall	Hillsborough Resources Ltd	-	Coking Coal / PCI Coal	Sedimentary	A; G; TR; RD (4860 m); CQ;
Wolverine (Perry Creek)	Western Canadian Coal Corp	093P 015, 025	Coking Coal	Sedimentary	RD (4860 m); GP; GT; CD

Work Program Abbreviations

A = access, trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling, totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; OP-BU = open-pit bulk sample; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching; UG (X m) = X metres of underground development; UG-BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)

Figure 3.6. Trench exposing coal seams, Goodrich-Central South project.

Canadian Dehua International completed a modest drill program on its **Sukunka** coal property.

South of Tumbler Ridge

Kennecott Canada Exploration Ltd completed a one-hole rotary drill program on its **Murray River** metallurgical coal property located south of Tumbler Ridge.

Elk Valley Coal Corporation completed a rotary drilling program that it began in 2005 in the **Babcock Mountain** area of the idle Quintette mine site. The program focused on the 'Window' area along the east flank of Babcock Mountain. . The new data will enable the company to increase its confidence in the property's coal resource.

NEMI continued to explore the coal measures of the Gates Formation on the **Roman Mountain** block, about one kilometre due south of its operating Trend mine. The company's 2006 program focused on the higher elevation areas along a southeast trend from work it completed on the tight syncline in 2005. The program consisted of significant trenching, more than 6000 metres of air rotary and core drilling, and the development of a new access road from the minesite. The program confirmed the structural model for the deposit including the location, number and thickness of seams and the quantity of coal. The data will ultimately support calculations that will lead to an increase in the reserve base for the property. The Roman Mountain block currently contains 26.2 million tonnes of coal classified as 'inferred'.

Hillsborough Resources Limited continued to evaluate its **Horizon** (formerly Five Cabin) metallurgical coal property centered 15 kilometres southwest of the Quintette minesite. The property covers the coal-bearing strata of the Gates and Gething formations. On the property both formations are folded into a northwest-trending asymmetrical syncline, part of the regional-scale Five Cabin syncline, with typically gently dipping limbs. An extensive infill air-rotary drilling program, begun in 2005, further defined the Horizon block and expanded resources in the North Ridge area (Figure 3.7). The program identified six Gates Formation coal seams and three Gething Formation coal seams of economic interest. The density of drilling enabled an in-place coal resource to be calculated. In July, the company released a combined surface and underground measured plus indicated coal resource for the Horizon property of 143.1 million tonnes. An underground measured plus indicated coal resource of 49.66 million tonnes was determined for parts of the three thickest seams exhibiting shallow dip angles (less than 16 degrees) above a depth of 400 metres. Seams 1.1 and 6.1 of the Gates Formation average 2.15 metres and 3.17 metres thick, respectively, and seam B2 of the Gething Formation averages 3.85 metres thick. Also, the company initiated exploration drilling on the **Waterfall** block in an effort to delineate more steeply dipping coal seams.

The Horizon project entered the pre-application stage of the Environmental Assessment review process in 2005. Hillsborough Resources completed environmental baseline studies towards the end of 2006. A scoping study outlined the potential for a 1.0 to 1.7 Mtpa operation with a 15 year mine life. Additional in-fill drilling, in support of a full feasibility study, and an underground bulk sample program are planned for 2007.

Figure 3.7. Air-rotary drilling to delineate coal resources, Horizon project.

Anglo Coal Canada Inc conducted a major air-rotary drilling program on its **South Ridge** coking coal property located to the southeast and along strike from the Hillsborough Resources' Horizon-North Ridge property. The program tested a 4.5-kilometre strike length of coal-bearing sedimentary rocks of the Gates and Gething formations. Like Horizon-North Ridge, the stratigaphy is folded into anticline syncline pairs which have fold axes following a northwest trend. Results from the project have not been made public, but the continuity of seams and consistency of seam thicknesses observed on the Horizon-North Ridge property likely extend onto the South Ridge ground.

Anglo Coal Canada completed smaller air-rotary drilling programs on the **Reesor** and **Tentfire/Prospect** properties and examined the **Turning Mountain** property.

Exploration on the large **Belcourt-Saxon** coking coal project, located toward the southeast end of the Peace River Coal Fields, extended into 2006. Fieldwork by operator Belcourt Saxon Coal Limited Partnership was confined to the completion of air rotary drilling on the **Belcourt South (Holtslander)** property and geotechnical assessment of a potential access corridor. However, significant geological modeling, coal quality testing, scoping and feasibility studies were conducted throughout the year on all of the properties that comprise the Belcourt-Saxon project (*i.e.* Belcourt North, Belcourt South, Omega, Saxon East and Saxon South).

Wolverine Valley Area

Western Canadian Coal Corp explored two areas near the **Perry Creek** pit, the current source of hard coking coal at its producing Wolverine mine. Rotary drilling evaluated one area about 4 kilometres northwest of the Perry Creek pit and a second area along the W14 drainage immediately south-southeast of the current pit design. Both areas may receive follow-up exploration in 2007. A limited in-pit drilling program was also completed.

The **Hermann** coking coal property of Western Canadian Coal Corp is located south of the Wolverine Valley and about 16 kilometres southwest of Tumbler Ridge. The property has been the subject of extensive exploration programs through 2005-2006 and the company has proposed to develop the property as a satellite mine to its Wolverine operation, located 12.5 kilometres by road to the north. Drilling in 2005 elevated the Hermann deposit to the indicated reserve level. Additional rotary drilling was completed in 2006 to improve reserve definitions and large diameter core drilling of the seams obtained samples for coal quality testwork. Project planning and feasibility studies took place throughout the year and engineering and environmental work will continue into 2007. The Hermann project formally entered the province's Environmental Assessment (EA) process in July, 2006. Western Canadian Coal submitted its application for an EA Certificate in December, 2006. The proposed mine plan includes the development of four pits (Hermann North 1, 2 and 3 and Hermann Syncline) to access coal from five seams (E, E4, F, G and J with an aggregate thickness of about 14.8 metres) in the Early Cretaceous Gates Formation. The estimated total clean coal production for the mine is 9.0 million tonnes at an annual rate of 0.8 to 1.1 Mtpa. The estimated capital cost of the Hermann project is $55 million and the operation would employ a workforce of 60. An estimated 110 workers would be required during the 15 month construction period.

Dawson Creek to Tumbler Ridge

Hillsborough Resources Limited re-commenced exploration on its **Wapiti** thermal coal property centered about 40 kilometres northeast of Tumbler Ridge. The company intends to develop a 0.6 Mtpa coal mine that could supply a coal and biomass-fueled 184-megawatt power generation plant proposed by AESWapiti Energy Corporation, a joint-venture between power-giant AES Corp and Hillsborough Resources. The energy project, comprised of a technologically advanced, circulating fluidized bed generation plant, powerline and thermal coal mine, is in the pre-application phase of the EA review process. AESWapiti plans to bring the plant on-stream in 2010 and has already signed binding power agreements with BC Hydro.

The coal measures occur within sandstone, siltstone, mudstone and conglomerate of the Late Cretaceous Wapiti Group. The surface mineable coal resource for the property is 31.1 million tonnes of measured and indicated coal of immediate interest (NI 43-101 compliant). The coal has a rank of high-volatile C bituminous with a calorific value of 20 MJ/kg for raw coal, is low in sulphur and other trace metals, and has an ash content of approximately 29%.

Exploration in 2006 targeted the No. 1 seam, a near surface, shallow north-northeast dipping seam that ranges between 1.6 – 2.1 metres thick. A slot-trench exposed the seam allowing the company to extract a 40-tonne sample of coal that has been earmarked for local markets (Figure 3.8). A small sample was also sent away for combustion testing. A total of 34 shallow rotary-drill holes tested the seam and the new data is expected to enhance the property's resource base.

METAL EXPLORATION PROJECTS

Action Minerals Inc (50%) and joint venture partner Aries Resource Corp conducted a helicopter-supported diamond drilling program on several high-grade copper veins at their **Trident** project, centered 170 kilometres west of Fort Nelson in the Muskwa-Kechika Management

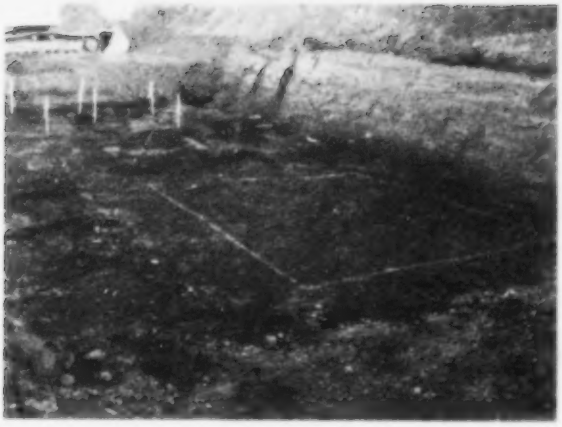

Figure 3.8. Trench exposing hangingwall of Seam No. 1 prior to excavation, Wapiti project (photograph courtesy of Ed Beswick).

Figure 3.9. Erecting diamond drill on newly constructed pad, Trident property (photograph courtesy of Victor Koyanagi).

Area (Figure 3.9). The Trident project consists of numerous properties, including the historic Churchill Copper / Magnum mine, the Davis Keays advanced prospect, and a large block of tenure optioned from Twenty-Seven Capital Corp. The tenure encompasses about 1000 square kilometres of Proterozoic stratigraphy that Twenty-Seven Capital covered with an aeromagnetic survey in 2005. Preliminary data from that survey outlined magnetic anomalies that coincide with hematite- and siderite-rich breccias, features consistent with the Iron Oxide-Copper Gold (IOCG) deposit model. Prospecting by Action Minerals at one of the anomalies discovered the Missy high grade copper vein. The vein is reported to be more than 6 metres wide and grab samples of vein material assayed up to from 5.2% to 26.3% copper. Drilling of the vein took place prior to the end of the season. The company has established a winterized camp on the property and intends to continue its program throughout the winter.

OUTLOOK FOR 2007

Coal production from the Peace River Coal Fields is expected to increase in 2007 as the new Wolverine and Trend mines mature. The proposed Brule PCI coal mine and the proposed Trend coking coal mine expansion are expected to proceed. The Willow Creek mine might reopen and contribute to the total production figure for the region.

One or more of the coal projects currently in the Environmental Assessment process could be certified in 2007 and begin the permitting phase. Bulk sample projects are anticipated at the Horizon-North Ridge and Goodrich-Central South projects. Large resource definition drilling programs, possibly leading to pre-feasibility or full feasibility studies, are expected for several projects that were active in 2006.

Confidence in the region was also demonstrated by the aggressive positioning of Anglo Coal Canada Inc. The company's consolidation of important coking coal properties may provide a more financially stable platform that is more resilient to market fluctuations.

The Trident copper project is expected to continue in 2007 and may include a drilling program that will test some of the IOCG targets.

Overall, 2007 is expected to be another very busy year in northeast British Columbia.

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CENTRAL REGION

By Bob Lane, PGeo
Regional Geologist, Prince George

SUMMARY AND TRENDS

Mineral exploration in the Central Region in 2006 was highlighted by a significant increase in the level of activity over last year. As in recent years, the majority of exploration projects targeted porphyry copper-gold deposits within the Quesnel Terrane and eastern Stikine Terrane. There was also renewed interest in other mineral deposit types in these and other terranes in the Central Region. These included mesothermal veins in the Barkerville and Quesnel terranes, epithermal gold deposits in the Stikine Terrane, porphyry molybdenum+/-copper deposits in the Stikine and Cache Creek terranes, and sedimentary-exhalative zinc-lead-silver deposits in the Foreland Terrane. The placer gold sector, while still a 'going concern' in traditional localities within the region, is not covered in this report.

High base metal and precious metal commodity prices underpinned a strong investment climate and enabled many companies to raise abundant capital for exploration, deposit appraisal and mine development. Further evidence of the positive investment climate were the significant number of new option agreements signed, the increase in the amount of mineral tenure acquired, and the number of grassroots or reconnaissance-style projects conducted. The high level of activity exceeded both the capacity of supporting infrastructure, such as assay laboratories and diamond drilling companies, and the available geological and engineering expertise. The result was longer than normal 'turn-around' times for assay results; delay, deferral or cancellation of drilling programs; and frustrated project geologists and company executives.

Exploration expenditures rose for the 7th consecutive year to an estimated $46.5 million (Figure 4.1), an increase of about $12 million over the estimate for 2005. The amount of exploration drilling increased to 176 000 metres (Figure 4.2) representing a 20% jump from 2005. In all there were 39 major exploration projects, 14 of which had expenditures of $1 million or more.

Exploration highlights, in alphabetical order, include:

- assessment of the Akie, Pie and Yuen zinc-lead-silver sedimentary-exhalative properties in the Gataga-Kechika Trough area;
- identification of a strong multi-element stream-silt anomaly, successful follow-up prospecting and staking of a 100-kilometre trend of the Sitlika Assemblage;
- aggressive definition drilling at the Gibraltar site resulting in a large increase to the mine's reserve base;
- discovery of significant alkalic porphyry mineralization at the Kwanika property;
- continued encouraging exploration results from several targets that are part of the Mount Polley alkalic porphyry system;
- initiation of a major underground exploration program on the North zone at the dormant QR gold mine;
- encouraging drill intersections from the Slide occurrence, part of the large JTM alkalic porphyry system;
- a major, systematic drilling program at the Spanish Mountain bulk tonnage gold prospect that confirmed grade and expanded the dimensions of the mineralized area;
- intersections of broad intervals of epithermal vein mineralization at 3Ts that enhance the property's potential, and;
- successful extension of the Megabuck zone at the Woodjam gold-copper prospect.

Three major open pit metal mines, Mount Polley, Gibraltar and Kemess, continue to operate in the region. Each operation enjoyed a very profitable year and conducted significant minesite exploration to evaluate the

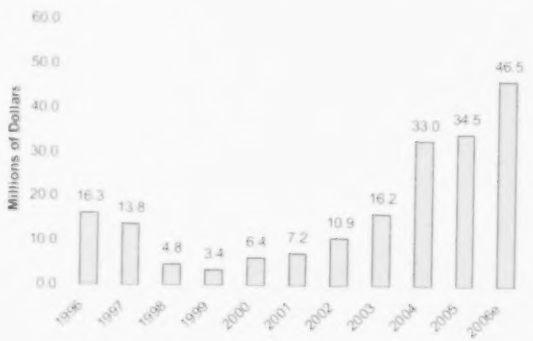

Figure 4.1. Annual Exploration Expenditures, Central Region.

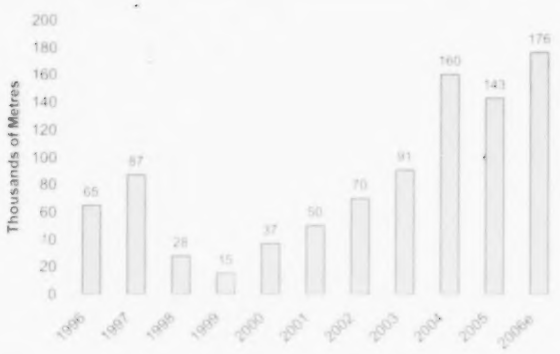

Figure 4.2. Annual Exploration Drilling, Central Region.

economics for pit expansion. Estimated production and reserves are provided in Table 4.1.

Reopening of the **QR** gold mine is anticipated for 2007. The project received a Mines Act permit in December, 2006. The Kemess North project is under a joint Federal-Provincial panel review and a decision on the project is expected by mid-2007. The Mt. Milligan project, which had its Environmental Assessment (EA) certificate expire in 2003, is under new management and is in the pre-application phase of the formal EA review process. A small open pit mine was proposed for the Bonanza Ledge zone.

The locations of operating mines, major exploration projects and smaller exploration projects believed to have regional significance are shown on Figure 4.3.

MINES AND QUARRIES

METAL MINES

The **Gibraltar** copper-molybdenum mine (Figure 4.4), owned and operated by Taseko Mines Ltd, is located near McLeese Lake.

Anticipated annual production for 2006, based on reports for the first nine months of the year, is estimated to be 23 000 tonnes (50 million pounds) of copper and more than 360 tonnes (800 000 pounds) of molybdenum. Average mill throughput was approximately 32 000 tonnes per day. The mine directly employs about 270 workers.

The Gibraltar deposits occur within 'Mine Phase' tonalite, part of the Late Triassic Granite Mountain batholith. The batholith intrudes Cache Creek Group rocks between the Pinchi and Fraser River fault systems. Mining is taking place from the stage IV Pollyanna pit, but development of stages III and IV of the Granite Lake pit may be initiated as early as 2007. Development of the Pollyanna-Gibraltar East Connector zone and the 98 Oxide zone are not expected to proceed for several years.

A $62 million project to upgrade and expand the concentrator commenced in 2006 and is scheduled for completion in early 2008. A semi-autogenous grinding (SAG) mill will be added to the concentrator's grinding circuit to improve the efficiency of the present milling and crushing system. Replacement of the flotation recovery system will result in increased copper and

TABLE 4.1. FORECAST MINE PRODUCTION, CENTRAL REGION, 2006

Mine	Operator	Mine Workforce	Forecast Production (tonnes or kilograms)	Proven and Probable Reserves (effective date)
Metals				
Mount Polley	Imperial Metals Corporation	~280	26 300 t Cu, 1220 kg Au, 14 000 kg Ag	40.98 million tonnes grading 0.448% Cu and 0.318 g/t Au (January 1, 2006)
Gibraltar	Taseko Mines Ltd	~270	23 000 t Cu; 360 t Mo	232.6 million tonnes grading 0.318% Cu and 0.010% Mo (September 30, 2006)
Kemess South	Kemess Mines Ltd (Northgate Minerals Corp)	~450	9600 kg Au, 36 000 t Cu	68.03 million tonnes grading 0.65 g/t Au and 0.21% Cu (December 31, 2005). Kemess North (Probable) 414 million tonnes grading 0.31 g/t Au & 0.16% Cu
Industrial Minerals				
Giscome	Pacific Lime Products Ltd	2 (seasonal)		
Nazko	Lightweight Advanced Volcanic Aggregates	6 (seasonal)		

Figure 4.3. Operating mines, major exploration projects and selected smaller projects, Central Region, 2006.

Figure 4.4. Mining in the Pollyanna pit, Gibraltar mine.

molybdenum recoveries. Copper and molybdenum production are expected to increase by more than 30%. The site's unit operating costs are expected to decrease by approximately 10% through a combination of increased throughput and improved recoveries of both copper and molybdenum.

The Solvent Extraction-Electrowinning (SX-EW) plant, idle since 1998, was refitted and may begin to produce LME Grade cathode copper by year's end. Oxidized copper ore not suitable, or too low grade for conventional milling, and stockpiled since the mine was re-started in 2004, will be the feedstock for the plant. The plant has the capacity to produce up to 7 million pounds of cathode copper annually.

On the exploration front, Taseko commenced an extensive definition drilling program in areas surrounding some of the existing pits. This work was successful in reclassifying a portion of the 557 million tonne resource to the reserve category and will extend the life of the mine.

The **Mount Polley** copper-gold mine (Figure 4.5) reopened in March, 2005, after being placed on "care-and-maintenance" in September, 2001. It is owned by Imperial Metals Corporation. The mine is centered between Bootjack and Polley lakes, near the hamlet of Likely. Production for the first 9 months of 2006 was 18 764 tonnes (41 367 439 pounds) of copper, 886.0 kilograms (28 487 ounces) of gold and 9878 kilograms (317 587 ounces) of silver from the milling of 4.95 million tonnes of ore. Average mill throughput exceeded 18 000 tonnes per day. Ore was mined, and blended prior to milling, from the expanded Bell pit, the new high-grade Wight pit and low grade stockpiles.

The Southeast zone (with a mineable reserve of 2.1 million tonnes grading 0.273% Cu and 0.514 g/t Au) was permitted for development in 2006, but is not expected to reach production until at least late 2007.

The company designed a pilot heap leach test program for 200 000 tonnes of oxidized copper ore from the upper part of the Springer zone. The test is planned for 2007. If it is determined to be economic, a full-scale program will be considered for the approximately 14 million tonnes of remaining oxidized Springer ore.

Most of the mineralization at Mount Polley occurs within 'crackled' to brecciated monzonite and plagioclase porphyry phases of the Late Triassic Polley stock. The best copper and gold grades are typically associated with zones of intense K-feldspar alteration.

Imperial Metals also continued its exploration efforts on its two mining leases and on its adjacent claims. Evaluation of the Northeast zone (Wight pit area) continues and may result in an expansion of the deposit's resource. Encouraging drill assay results from the C2 and Boundary zones have increased the likelihood for these deposits to become millfeed in the future. A summary of this activity is provided in the *Exploration Highlights* section of this report.

The **Kemess** gold-copper mine (Figure 4.6), located in the Toodoggone region about 300 kilometres northwest of Mackenzie, is owned and operated by Northgate Minerals Corporation. Metal production for first nine months of 2006 totaled 7109 kilograms (228 549 ounces) of gold and 27 195 tonnes (59 954 000 pounds) of copper from milling 13.7 million tonnes of ore. Production for calendar 2006 is expected to reach approximately 9600 kilograms (310 000 oz) of gold and 36 000 tonnes (80 million pounds) of copper.

The 50 000 tonne per day mine has been in operation since 1998 and currently employs approximately 450 workers. Proven reserves at Kemess South as of December 31, 2005, stood at 68.03 million tonnes grading 0.65 g/t Au and 0.21% Cu.

Ore is mined from a single open pit developed on the Kemess South deposit. The deposit occurs within a gently southeast-dipping body of Late Triassic quartz monzonite called the Maple Leaf pluton. The southern margin of the intrusion is in fault contact with fine-grained sedimentary rocks of the Permian Asitka Group. Epiclastic rocks of the

Figure 4.5. Expansion of the Bell pit, Mount Polley mine.

Figure 4.6. Mining of the Kemess South deposit, Kemess mine.

Toodoggone formation unconformably overly the intrusion. Hypogene ore comprises the bulk of the deposit with lesser supergene, leached cap and 'transitional' ore types.

In 2006, a modification of the northwest end of the pit was required to correct structural instability of pit walls. The pushback will generate an additional 22 million tonnes of waste rock, but will also release 420 000 tonnes of ore that will partly offset the overall cost of the program.

A re-assessment of an area immediately east of the Kemess South pit was completed and may outline additional ore reserves. Existing reserves will provide mill feed until early 2009, but the overall mine life of the operation could be extended to 2020 if the Kemess North mine proposal (with a prôven and probable mineable reserve of 424 million tonnes grading 0.30 g/t Au and 0.155% Cu) receives approval. The Environmental Impact Assessment report for the Kemess North proposal is undergoing review by a joint Canada-British Columbia panel. The review is expected to wrap-up in mid-2007.

QUARRIES

Mining operations at the **Nazko** lava rock quarry did not occur in 2006. Owner Crystal Graphite Corporation went into receivership early in the year and the property became the responsibility of receiver PricewaterhouseCoopers. The site was inactive until November when new owner Lightweight Advanced Volcanic Aggregates Ltd was permitted to ship a limited tonnage of previously screened and stockpiled material to customers in the lower mainland. The company hopes to reactivate quarrying of the basalt tephra in the first quarter of 2007.

The other quarries in the region were dormant in 2006. Sufficient ballast remained from the 2005 mining campaign at CN Rail's **Giscome** volcanic rock quarry to supply the company's mainline and spur line maintenance requirements. The nearby Giscome limestone quarry, now owned by Chemical Lime Company of Canada Inc supplied a limited tonnage of crushed limestone to a local pulp mill. Interestingly, competitor Graymont Western Canada Ltd investigated the potential for limestone on the adjacent **Pat** mineral claims.

Several small industrial mineral entrepreneurs quarried small tonnages of a variety of stone products for marketing purposes. Perhaps the most interesting material is an occurrence of attractive fossiliferous limy shale that was investigated by David **Simonar** in the Pine Pass.

EXPLORATION HIGHLIGHTS

Major 2006 exploration projects in the Central Region are listed in Table 4.2. The following information was compiled prior to the end of the calendar year and is incomplete. Many projects were active well into December and or operators had not received results from their work conducted earlier in the year. Estimates for work completed are used in some cases.

Toodoggone-Kemess Area

Northgate Minerals Corporation continued to explore its large tenure package that encompasses the Kemess mine. Most of the drilling was focused east of the **Kemess North** deposit and targeted the deep **KN Offset** and **Kemess East** zones. Drilling of the KN Offset zone, located immediately east of the East Boundary fault, followed up on a 2005 intersection in hole KN-05-24 that averaged 0.31 g/t Au and 0.24 % Cu over 307.6 metres. The Kemess East zone is essentially a continuation of KN Offset.

A deep-penetrating IP geophysical (Titan) survey was performed over the Kemess North deposit and surrounding areas. Post-mineral volcanic rocks of the Jurassic Hazelton Group mask the Triassic Takla Group and the late Triassic intrusions that generated the mineral deposits in the area. Sub-vertical faulting appears to have shifted structural blocks up to the east suggesting that the barren cover is thinner and targets may be closer to surface. The survey outlined the known mineralized zones and identified several new targets, including an intriguing buried target east of KN Offset.

A late season infill drilling program was completed immediately east of the **Kemess South** pit in an attempt to add tonnage to the mine's reserve base and extend the life of the mine. The drilling confirmed continuity of mineralization and an economic evaluation to upgrade the resource was initiated.

The Atlas East epithermal gold-silver prospect (Figure 4.7) on the **Pil** property, centered approximately 35 kilometres north of the Kemess mine, was the primary target of the Finlay Minerals Ltd 2006 exploration

TABLE 4.2. MAJOR EXPLORATION PROJECTS, CENTRAL REGION, 2006

Property	Operator	MINFILE (NTS)	Commodity	Deposit Type	Work Program
Akie	Mantle Resources Inc	094F 031	Zn-Pb-Ag	Sedimentary-Exhalative	G; GC; DD (4881m)
Albert's Hump (Ranch)	Guardsmen Resources Inc	094E 079	Au	Epithermal Vein	G; GC; DD (645m)
Cariboo Gold Quartz (incl. Bonanza Ledge, Mucho Oro)	International Wayside Gold Mines Ltd	093H 019	Au	Replacement; Mesothermal Vein	A; G; TR; DD (~4500 m); GT; PF; EN
Chu	TTM Resources Ltd	093F 001	Mo	Calc-Alkalic Porphyry	A; G; GC; DD
Chappelle (Baker mine area)	Sable Resources Ltd	094E 026	Au-Ag	Epithermal Vein	DD (1372 m)
Copper Ace South	Copper Ridge Explorations Inc	093B 061, 062	Cu-Mo	Calc-Alkalic Porphyry	G; DD (801 m)
Davidson	Silver Quest Resources Ltd	093F 037	Au-Ag	Epithermal Vein	G; DD (353 m)
Fran	Yankee Hat Minerals Ltd	093N 207	Au-Cu	Alkalic Porphyry	A; G; GC; GP; DD (2060 m)
Frank Creek, SCR, Ace	Barker Minerals Ltd	093A 142, 143, 153	Cu-Zn-Pb-Au-Ag	VMS; Mesothermal Vein	A; G; GC; TR; DD (2037 m)
Gibraltar	Taseko Mines Ltd	093B 005-008, 011-013	Cu-Mo	Calc-Alkalic Porphyry	G; GC; DD (~26 000 m)
Hen	Swift Resources Inc	093A 048	Au	Mesothermal Vein	G; GC; TR
Hepburn Lake	Acrex Ventures Ltd	-	Au	Mesothermal Vein	A; G; GC; DD (1958 m)
JTM (Misty, Slide)	Teck Cominco Limited	093N 001	Cu-Au	Alkalic Porphyry	G; GC; DD (3070 m)
KN Offset / Kemess East	Northgate Minerals Corporation	094E 021	Au-Cu	Porphyry	A; G; GC; IP; DD (8632 m)
Kemess South	Northgate Minerals Corporation	094E 094	Au-Cu	Porphyry	DD (2936 m)
Kliyul	Geoinformatics Exploration Inc	094D 023	Cu-Au	Porphyry	G; GC; DD (751 m)
Kwanika	Serengeti Resources Inc	093N 018, 073	Cu-Au	Alkalic Porphyry	G; GC; IP; DD (1889 m)
Lawyers	Bishop Gold Inc	094E 068	Au-Ag	Epithermal vein	G; GC; DD (645m)
Lloyd-Nordik	Valley High Ventures Ltd	093A 160	Cu-Au	Alkalic Porphyry	G; GC; IP; MAG; DD (~5600 m)
Lorraine-Jajay	Teck Cominco Limited	093N 002, 066, 224	Cu-Au	Alkalic Porphyry	A; G; GC; DD (2606 m)
Lustdust	Alpha Gold Corp	093N 009, 008	Au-Ag-Cu-Zn-Pb	Skarn; Manto; Mesothermal Vein	A; G; GC; TR; DD (6287 m); RC (3196 m)
Mount Polley	Imperial Metals Corporation	093A 008, 093A 164	Cu-Au-Ag	Alkalic Porphyry	G; GC; TR; DD (~23 000 m); PF; FS

TABLE 4.2. CONTINUED

Property	Operator	MINFILE (NTS)	Commodity	Deposit Type	Work Program
Lustdust	Alpha Gold Corp	093N 009, 008	Au-Ag-Cu-Zn-Pb	Skarn; Manto; Mesothermal Vein	A; G; GC; TR; DD (6287 m); RC (3196 m)
Mount Polley	Imperial Metals Corporation	093A 008, 093A 164	Cu-Au-Ag	Alkalic Porphyry	G; GC; TR; DD (~23 000 m); PF; FS
Mouse Mountain	Richfield Ventures Corp	093G 003	Cu-Au	Alkalic Porphyry	G; GC; 3D IP; TR
Mt. Milligan	Terrane Metals Corp	093N 191, 194	Au-Cu	Alkalic Porphyry	G; DD (~8500 m); MT; FS
Nithi Mountain	Leeward Capital Corp	093F 006-016	Mo	Calc-Alkalic Porphyry	A; G; GC; DD (3275 m)
Pat (Giscome)	Graymont Western Canada Ltd	093J 025	Limestone	Sedimentary	A; G; GC; DD (~2400 m)
Pie	Ecstall Mining Corp	094F 023	Zn-Pb-Ag	Sedimentary-Exhalative	G; GC; DD (4263 m)
Pil	Finlay Minerals Ltd	094E 029, 083, 213, 216	Au-Cu	Porphyry	A; G; GC; TR; DD (1945 m)
QCM	Canadian Gold Hunter Corp	093N 200	Au	Mesothermal Vein	IP; EM; MG; DD (1529 m)
QR	Cross Lake Minerals Ltd	093A 121	Au	Skarn	A; UG; G;
Redton	Geoinformatics Exploration Inc	093N 067, 082, 095	Cu-Au	Alkalic Porphyry	G; GC; GP; DD (4032 m)
Shasta	Sable Resources Ltd	094E 050	Au-Ag	Epithermal Vein	DD (1511 m)
Spanish Mountain	Skygold Ventures Ltd / Wildrose Resources Ltd	093A 043	Au	Mesothermal Vein	A; G; GC; AB-EM; MAG; RC (5040 m); DD (21 846 m)
Tchentlo	Serengeti Resources Inc	-	Cu-Au	Alkalic Porphyry	G; IP; DD (213 m)
3Ts	Silver Quest Resources Ltd	093F 055, 068	Au-Ag	Epithermal vein	G; DD (~4000 m)
Wasi Creek	Selkirk Metals	094C 024	Zn-Pb-Ag	Mississippi-Valley Type	A; G; GC; DD (~1000 m)
Westport	Williams Creek Explorations Ltd	093H 027, 034	Au	Mesothermal Vein	A; G; GC; DD (~2000 m)
Woodjam	Fjordland Exploration Inc / Wildrose Resources Ltd	093A 078, 124	Au-Cu	Calc-Alkalic Porphyry	A; G; GC; DD (8172 m)
Yuen	Ecstall Mining Corp	094F 013	Zn-Pb-Ag	Sedimentary-Exhalative	G; DD (847 m)

Work Program Abbreviations

A = access; trail; road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; OP-BU = open-pit bulk sample; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulatetion drilling; TR = trenching; UG (X m) = X metres of underground development; UG-BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)

Figure 4.7. Drilling the Atlas East epithermal gold-silver prospect, Pil property.

campaign. The property is underlain predominantly by monzonite and quartz monzonite phases of the Black Lake Intrusive Suite and andesitic volcanic rocks of the Toodoggone formation. Drilling at Atlas East intersected narrow quartz-pyrite breccias, quartz veins with visible gold and/or electrum, and bands of silicification within broad zones of intensely clay-altered andesite. Hole A06-12 intersected 5.95 metres grading 2.12 g/t Au and 113.5 g/t Ag, including a 1.05-metre section that assayed 9.18 g/t Au and 361.2 g/t Ag. Two other zones, the nearby Atlas West epithermal gold-silver showing ("Serem trenches") and the Northwest porphyry copper-gold zone, were each tested with two drillholes.

Sable Resources Ltd completed a 20-hole diamond drilling program on its **Shasta** epithermal gold-silver deposit east of Black Lake. The work confirmed the presence of potentially economic grades of gold-silver mineralization in the quartz-calcite-sulphide vein system and extension of the existing underground workings to access the ore has been proposed. The company plans to commence development early in 2007 and will utilize its nearby 100 tonne per day mill and tailings facilities on the Baker minesite. Sable also drilled a deep core hole to test its Black Gossan porphyry copper-gold prospect, on the **Chappelle** claims, and drilled seven core holes to investigate epithermal gold-silver mineralization on the Ridge zone near the **Baker** mine site.

Stealth Minerals Ltd conducted an Induced Polarization survey on its **Sofia** property immediately south of the Toodoggone River and outlined a broad chargeability zone that is centered on the Sofia porphyry copper-gold showing discovered by the company in 2004. Elsewhere in the Toodoggone region, Stealth completed geochemical sampling programs on its **Regal**, **Mac**, **FogMess** and **Louis** properties.

Sister company Cascadero Copper Corp completed a modest prospecting, mapping and geochemical sampling program on is **Pine** porphyry copper-gold prospect that straddles the Finlay River north of the Kemess mine.

Bishop Gold Inc completed five diamond drillholes west of the former Cliff Creek portal on its **Lawyers** epithermal gold-silver property located just south of the Toodoggone River. Multiple zones of silicification, brecciation and quartz veining, ranging from 2 to 16 metres in width, were intersected. The highest grades encountered were in hole 10-CC-06 which intersected 4.4 metres averaging 3.45 g/t Au and 81.1 g/t Ag and 14.0 metres averaging 1.18 g/t Au and 2.37 g/t Ag.

Further north, Guardsmen Resources Inc conducted a modest diamond drilling program on its **Al (Ranch)** epithermal gold-silver property. The program was designed to examine the bulk tonnage gold potential of the Thesis III zone where previous workers had discovered bonanza gold grades in quartz-barite stringers.

Starfire Minerals Inc completed about 50 line-kilometres of IP and magnetic geophysical surveying on its **Porphyry Pearl** bulk tonnage copper-gold property located north of the Toodoggone River.

Gataga – Kechika Trough

In the Gataga area north of Williston Lake, several major exploration programs targeted sedimentary-exhalative (sedex) zinc-lead-silver mineralization within shales of the prospective middle to late Devonian Gunsteel Formation.

Mantle Resources Inc drilled the **Akie** deposit focusing on the Cardiac Creek zone where mineralization is thicker and grades are typically higher. Earlier workers traced the northwest-trending, steep southwest dipping stratabound zone for 1600 metres along strike and for more than 800 metres down dip. The mineralized horizon is up to 30 metres thick and consists of finely laminated sphalerite, galena and pyrite within a thicker zone of pyrite and barite (Figure 4.8). Seven of the eleven holes completed by Mantle in 2006 pierced the mineralized horizon, including hole A-06-39A which intersected 18.1 metres averaging 8.16% Zn, 1.58% Pb and 13.9 g/t Ag.

Figure 4.8. Laminated zinc-lead-silver sedex mineralization, Akie deposit.

The primary objective of the 2007 program will be to acquire a sufficient density of data to support the calculation of a NI 43-101 compliant resource estimate for the deposit.

Ten kilometres along trend to the northwest, Ecstall Mining Corporation identified a new sedex system on its **Pie** property. Hole P-06-07 cored multiple beds of nodular barite-pyrite and laminated pyrite within a 180-metre section of Gunsteel shale. The mineralized beds ranged up to 10 metres thick. Several more holes pierced the mineralized interval outlining a zone with a minimum strike length of 400 metres and down dip length of at least 500 metres. The mineralization is consistent with the distal component of a sedex deposit. On the **Yuen** property, 30 kilometres further northwest, and immediately northwest of the dormant Cirque sedex deposit, two deep stratigraphic holes intersected a thick section of Gunsteel shale that is interpreted to be part of a sub-basin. Ecstall plans to continue drilling each property in 2007.

Omineca Mountains

Teck Cominco Limited evaluated a number of targets on its **Lorraine-Jajay** and **JTM** (Jan, Tam and Misty) alkalic porphyry copper-gold properties centered northwest of Germansen Landing in the Swannell Ranges. The properties cover prospective geology of the Duckling Creek Syenite Complex and mineralization is typically comprised of disseminated chalcopyrite and lesser bornite in syenitic and biotite pyroxenite phases. The company completed seven drillholes on the Lorraine property. Drilling took place in an area southwest of the Main/Weber zone, in the south Lorraine Ridge, on Copper Peak and in Bishop Bowl. Each hole was successful in intersecting copper mineralization. At Copper Peak, hole L-06-111 intersected 15.2 metres averaging 0.41% Cu.

At JTM, IP geophysical surveys were completed over the Misty Main, Boundary and Slide zones. Diamond drilling tested a 3.5-kilometre IP chargeability anomaly that coincides with the Misty MINFILE occurrence and areas previously explored by several companies, including UMEX, in the 1970s. Four of the six holes drilled encountered mineralization within a sub-vertical body of intensely altered and foliated host rock. The longest mineralized interval was in hole JTM-06-02 which intersected 105.1 metres averaging 0.13% Cu. Two of four holes drilled to investigate the Slide IP chargeability anomaly, and near the Slide showing (Figure 4.9), intersected well-mineralized zones including a 55.5-metre interval in hole JTM-06-07 which averaged 0.72% Cu and 0.07 g/t Au.

To the east, Selkirk Metals Corporation drilled the Par and Carrie zinc-lead-silver horizons on its **Wasi Creek** Mississippi-Valley-Type property.

Figure 4.9. Examining mineralization from the Slide showing, JTM property.

Lorne and Chris Warren conducted limited programs on several targets in the Omineca Mountains including the **Jimmay** mesothermal vein prospect, the **Pen** and **Leggat** porphyry copper showings, and the **Diver Lake** (Bodine, Vent, Crystal and Eureka showings) volcanogenic massive sulphide (VMS) property. Late in the year, the latter property was optioned to Amarc Resources Inc. The showings are underlain by metasedimentary and metamorphic rocks of the Sitlika Assemblage, rocks equivalent to those that host the Kutcho Creek VMS deposits located 100 kilometres east of Dease Lake. Limited fieldwork confirmed the presence of a strong multi-element stream-silt anomaly, identified prospective quartz-bearing felsic volcanic rocks and located brecciated and layered sulphide mineralization. As a result, Amarc staked more than a 100-kilometre strike length of Sitlika stratigraphy and plan to aggressively explore the tenure in 2007.

Alpha Gold Corp continued to evaluate the auriferous Canyon Creek copper skarn zone on its **Lustdust** property north of Tsayta Lake located about 210 kilometres north-northwest of Prince George. The property is immediately west of the Pinchi fault zone and is underlain by deformed oceanic rocks of the Cache Creek Terrane. The Eocene Glover stock, an elongate body of monzonite and a series of related feldspar megacrystic dikes and sills, is genetically and spatially related to mineralization. Diamond drilling extended the sinuous geometry of the skarn system both down-dip and to the south. One highlight of the 30-hole program was a 13.8-metre intersection in hole LD06-18 that graded 1.98 g/t Au, 46.9 g/t Ag and 2.17% Cu. Trenching of a gold soil anomaly southeast of the Canyon Creek zone discovered the GD zone, a hematite-rich band with remnant sulphides that is similar in character to manto mineralization identified elsewhere on the property. A 10.3-metre chip sample across the zone graded 2.5 g/t Au, 26.4 g/t Ag and 2.11% Zn. The company also completed a reverse circulation drilling program in an area surrounding the historic Bralorne-Takla mercury mine to evaluate gold soil anomalies outlined in 2005.

Serengeti Resources Inc identified a new alkalic porphyry copper-gold occurrence on its **Kwanika** property located adjacent to the Pinchi fault system east of Tsayta Lake. Drilling and IP geophysical surveys were conducted on the northern part of the property in an area where previous workers reported a 'geological resource' of approximately 32 million tonnes averaging 0.2% Cu. An initial 5-hole drill program tested the central part of the resource area as well as other targets on the property. Three kilometres north of the resource area, hole K-06-04 intersected an 18.3 metre interval of potassically altered andesite grading 0.32% Cu and 0.152 g/t Au. A follow-up deep-penetrating IP geophysical survey outlined a chargeability anomaly associated with this new mineralized zone. The anomaly measures more than 1750 metres by 500 to 750 metres and is interpreted to extend to a depth of more than 250 metres. A second 5-hole drill program evaluated the new target and hole K-06-09 (located 250 metres south of hole K-06-04) intersected visually impressive copper mineralization over a 131-metre interval. The upper 33-metre interval displays native copper in a hematitic breccia, the middle 3-metre section contains supergene chalcocite and the lower 89-metre interval comprises hypogene mineralization consisting primarily of disseminated and stringer pyrite, and chalcopyrite in a strongly altered monzonite. The company is planning a winter drilling program to follow-up on their discovery.

Serengeti Resources Inc also completed a helicopter-supported, 3-hole diamond drill program on its **Tchentlo** porphyry copper-gold prospect, located immediately south of Tchentlo Lake. Drilling encountered a mafic-dominated sequence including numerous gabbroic rocks with abundant magnetite. Copper and gold values were weakly anomalous.

Over the winter of 2005-2006, Geoinformatics Exploration Inc completed an exhaustive data compilation, interpretation and modelling program of its mineral properties in the Omineca Mountains. The enormous **Redton** property, which extends northward from Tchentlo Lake, covers a large tract of the Quesnel Terrane geology prospective for bulk-tonnage porphyry copper-gold deposits. The work identified numerous areas requiring follow-up. The 2006 fieldwork campaign included regional silt sampling to augment existing Regional Geochemical Stream Sediment data for the area, bedrock mapping and diamond drilling of select targets (i.e. the Red, Tak and Rainbow zones). Assay results from drilling of the Red showing (Figure 4.10) include a 167-metre intersection of disseminated, fracture-controlled and stockwork mineralization in a variably-altered 'crowded porphyry' grading 0.31% Cu. Drilling of the Tak and Rainbow zones intersected propylitic alteration accompanied by sparse amounts of copper mineralization.

Geoinformatics Exploration also completed a modest drill program on its **Kliyul** porphyry copper-gold prospect further north. Hole KL06-30 intersected 221.8 metres of

Figure 4.10. Examining core from the Red prospect, Redton property.

propylitically altered fragmental basalt (Takla Group) averaging 0.20% Cu and 0.51 g/t Au. The company also added to its land position in the belt by acquiring the nearby **Mesilinka** project.

The **QCM** bulk tonnage gold property, near the village of Manson Creek, was evaluated by Canadian Gold Hunter Corp. The property covers a succession of pervasively carbonate-altered wackes and tuffaceous sedimentary rocks of the Slate Creek Succession (Takla Group). The altered rocks contain up to 10% cubic pyrite and are cut by a network of narrow quartz stringers. The 2006 program was designed to expand upon drill results from 2004 and 2005 programs, including a 141-metre intersection that averaged 0.78 g/t Au. Approximately 1500 metres of core drilling in 8 holes were completed.

Northern Nechako Plateau

Terrane Metals Corp, new owner of the **Mt. Milligan** property located northeast of Fort St. James, started preparing for a full feasibility study and for Environmental Assessment reporting requirements. The company completed an HQ core drilling program (Figure 4.11) to recover fresh rock from the MBX deposit for metallurgical testing. The Mt. Milligan alkalic porphyry gold-copper property has a measured and indicated mineral resource totaling 205.9 million tonnes grading 0.247% Cu and 0.6 g/t Au. Inferred resources are 16.3 million tonnes averaging 0.207% Cu and 0.5 g/t Au.

The closely-spaced MBX and Southern Star deposits comprise the Mt. Milligan resource. The deposits are primarily hosted in potassically-altered volcanic and volcaniclastic rocks of the Triassic Takla Group on the margin of small Early Jurassic monzonitic stocks, which can also be well mineralized. The MBX deposit is the main copper-gold zone and is situated along the footwall of the west-dipping MBX stock and along the Rainbow dike. The Southern Star deposit is hosted in the Southern

Figure 4.11. Large diameter core drilling of the MBX deposit, Mt. Milligan property.

Star stock and adjacent Witch Lake formation. Hypogene mineralization consists of chalcopyrite and lesser bornite and magnetite in areas of potassic alteration within a widespread propylitic alteration envelope. The 66 zone, immediately south of MBX, is a gold-only deposit that is not part of the property's resource. The WBX zone is a copper-gold deposit that lies along the western margin, or hangingwall, of the MBX stock. The DWBX copper-gold zone is displaced vertically downward along the Harris Fault.

The intent of a second phase of drilling, to be completed through the winter of 2006-2007, will be to convert inferred resources, principally in the WBX and DWBX zones, into the measured and indicated categories.

The North Contact gold zone on the **Fran** property, just north of Inzana Lake, was the subject of a major exploration program by Yankee Hat Minerals Ltd. Closely spaced trenching and drilling identified the North Contact zone over an 800-metre northwesterly trending strike length. Mineralization is spatially associated with the contact between a porphyritic monzodiorite of suspected Early Jurassic age, and hornfelsed volcaniclastic and sedimentary rocks of the Takla Group. The zone consists of narrow, quartz-pyrite-pyrrhotite-chalcopyrite vein mineralization enveloped by broad zones of lower grade material. For example, hole FR-59 intersected 4.85 metres grading 10.96 g/t Au, 40.15 g/t Ag and 1.48% Cu within a 54.6-metre interval averaging 1.18 g/t Au. Drilling of the zone is expected to resume early in 2007.

Southern Nechako Plateau

Leeward Capital Corp drilled the **Nithi Mountain** molybdenum property just 18 kilometres east, and within view, of the operating Endako molybdenum mine. The 2006 program built on results from 2005 drilling of the Alpha Trend, a 4-kilometre long east-northeast corridor. Molybdenite occurs in fractures and in ribboned quartz veins within argillically and potassically altered quartz monzonite (Nithi Mountain phase) of the Late Jurassic to Early Cretaceous Francois Lake Plutonic Suite. The most promising drill results came from the western part of the Gamma zone where hole N-06-7 intersected 76.2 metres averaging 0.10% MoS_2. A second phase of diamond drilling commenced in mid-December and will evaluate the Gamma, West Gamma and Caledonia zones.

In mid-December, TTM Resources Inc initiated a 5000-metre diamond drilling program on the Chu molybdenum porphyry prospect near Chutanli Lake south of Vanderhoof.

In the southern Nechako Plateau, Silver Quest Resources Ltd explored several epithermal gold-silver prospects including Davidson and 3Ts.

At the **Davidson** property, 120 kilometres south of Vanderhoof, Silver Quest drilled two core holes that expanded on last year's discovery of a new gold zone (hole DAV-05-02 intersected 64 metres averaging 1.80 g/t Au and 6.5 g/t Ag). Hole DAV-06-06 intersected 8.0 metres grading 10.7 g/t Au, 42.8 g/t Ag and 0.12% Cu within a 26.0 metre interval that averaged 3.98 g/t Au, 19.0 g/t Ag and 0.10% Cu. Mineralization is structurally controlled to disseminated, consisting of pyrite and variable amounts of pyrrhotite, chalcopyrite, sphalerite and galena, in strongly altered felsic volcanic rocks of the Early Jurassic Hazelton Group.

The **3Ts** property, about 20 kilometres further south, covers a northerly-trending, low sulphidation epithermal gold-silver quartz vein system. Multiple quartz-carbonate veins occur in welded rhyolite flows of the Early Jurassic Naglico formation. A flat-lying Late Cretaceous microdiorite sill cuts the veins. Previous work established a National Instrument 43-101 compliant resource for two discrete veins above the sill. A resource of 552 500 tonnes grading 6.82 g/t Au and 60.9 g/t Ag was calculated for an 800-metre length of the Upper Tommy vein and a resource of 273 800 tonnes grading 2.0 g/t Au and 133 g/t Ag was calculated for a 350-metre length of the Upper Ted vein.

Diamond drilling early in 2006 tested the Lower Ted vein and intersected a 30.9-metre section (17.2-metre true width) of quartz-carbonate veining that averaged 2.68 g/t Au and 152.1 g/t Ag. Late in the year, additional holes successfully intersected the Lower Ted vein over core lengths of more than 25 metres. The company hopes to have acquired sufficient data for the Lower Ted vein to support the determination of an NI 43-101compliant resource estimate.

Prince George and Mackenzie Areas

Northeast of Mackenzie, Wealth Management completed a second phase of grassroots exploration on its large **Mackenzie** gold property.

Graymont Western Canada Ltd completed two phases of diamond drilling for limestone on its **Pat** claims northeast of Prince George. The tenure is adjacent to Chemical Lime's dormant **Giscome** limestone quarry near Eaglet Lake. Over the winter Graymont will analyze the quality of the limestone sampled to determine its next course of action.

Quesnel and Wells-Barkerville Areas

An extensive trenching program by Richfield Ventures Corp on its **Mouse Mountain** alkalic porphyry prospect, northeast of Quesnel, exposed the Rainbow zone over a north-northwest strike length of approximately 350 metres (Figure 4.12). Mineralization consists of disseminated and fracture-controlled chalcopyrite and pyrite with prominent malachite and azurite in zones of weak to moderate potassic and silica-altered Nicola volcanic rocks. Selected grab samples assayed up to 1.3% Cu and 1.8 g/t Au. An 85 line-kilometre 3D IP geophysical survey was completed over part of the property and identified deep chargeability anomalies on the northwest flank of Mouse Mountain and east of a magnetic high.

In the Wells-Barkerville gold belt, International Wayside Gold Mines Ltd conducted pre-feasibility studies of the **Bonanza Ledge** gold deposit on its **Cariboo Gold Quartz** property. The Bonanza Ledge mineralized zone is up to 30 metres across and occurs within an overturned, northeast dipping sequence of metamorphosed turbidites, carbonates and tuffaceous rocks of the Paleozoic Snowshoe Group. Mineralization consists of numerous semi-massive to massive bands of fine to medium-grained pyrite that has preferentially replaced carbonate layers within tan-coloured phyllite. Previous underground development of the deposit in 2003 and 2004 yielded a 10 000 tonne bulk sample that was trucked to the Mount Polley concentrator for processing. In 2006, the company prepared a report that outlines its plans to mine, by open pit methods, approximately 250 000 tonnes of replacement and vein mineralization with an average grade of 7.3 g/t gold.

The company's exploration efforts focused on the **Mucho Oro** gold zone centered a few hundred metres southeast, and along trend, from the Bonanza Ledge zone. The geological setting is identical to that of Bonanza Ledge, but pyrite is much less ubiquitous and does not necessarily correlate with higher gold grades. More than 30 core holes tested the zone; the most promising assay results were from the Mucho Oro Zone #4 and include a 2.9 metre intersection in hole BC06-11 that graded 32.1 g/t Au.

Williams Creek Explorations Ltd drilled 10 holes on the **Westport** mesothermal vein property near Barkerville. Most of the holes tested the projection of the Mucho Oro gold zone that underlies the International Wayside tenure.

Figure 4.12. Trenching of the Rainbow zone near Mouse Mountain (photograph courtesy of Dirk Templeman-Kluit).

The program was completed late in the year and analyses were not available at press time.

Likely – Horsefly Area

In the central Cariboo, Imperial Metals Corporation continued to evaluate a number of alkalic porphyry copper-gold targets close to its operating **Mount Polley** mine. The **C2** zone was identified by drilling in the year 2000, but was not economic at the time because of low metal prices. In 2006, the C2 zone (including the higher grade Wagon Wheel magnetite breccia body), was further evaluated by trenching and 58 diamond-drill holes. It is located immediately south of the mined-out Cariboo pit and is only a few hundred metres from the mill's primary crusher. The tabular zone is hosted in variably potassically altered monzonite. It measures approximately 400 metres by 200 metres, strikes west-southwest, and is inclined steeply to the south. The previously reported measured and indicated resource for the C2 zone is 5.89 million tonnes grading 0.236% Cu and 0.304 g/t Au. Because of the zones proximity to the crusher and the need for additional material to blend with the high grade Wight pit ore, the C2 zone will likely be developed in 2007.

The **Boundary** zone (formerly known as the Lloyd-Nordik zone) occurs west of the Wight pit and was tested with 22 bore holes. The steeply inclined, tabular zone trends westerly onto tenure held by Valley High Ventures Ltd. Mineralization consists of a chalcopyrite and magnetite-bearing hydrothermally brecciated monzonite within potassically altered Upper Triassic to Lower Jurassic Nicola Group andesite (Figure 4.13). Highlight intersections from Imperial Metals 2006 program include a 34.8 metre intersection in hole ND06-06 averaging 0.98% Cu and 1.12 g/t Au and a 52.1 metre intersection in hole ND06-08 grading 0.49% Cu and 0.54 g/t Au.

Other targets that the company investigated by drilling in 2006 include Ace, Bell pit, Junction, Springer,

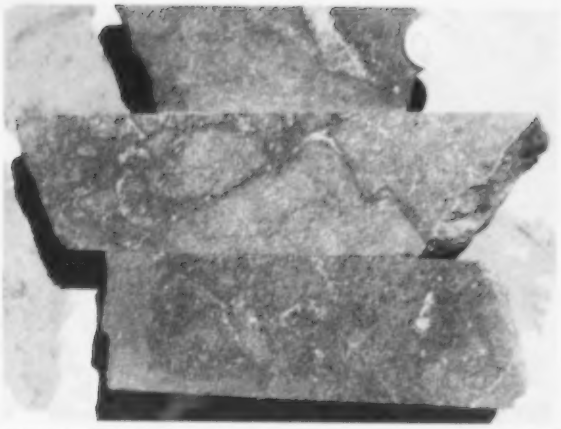

Figure 4.13. Mineralized core from the Boundary zone, north of Mount Polley.

Figure 4.14. Development of the North zone portal, QR gold mine (photograph courtesy of Jim Miller-Tait).

Southeast and Tall Fir. Results from limited drilling near the Bell pit, including a 113.2 metre intersection in vertical hole BD06-04 that graded 0.32% Cu and 0.59 g/t Au, suggests that pit expansion is a possibility. Trenching of the enigmatic Pond skarn zone was also conducted.

Valley High Ventures Ltd conducted a large diamond drilling program on its **Lloyd-Nordik** property immediately north of Mount Polley. The company focused on the Boundary zone that extends from tenure owned by Imperial Metals to the Lloyd 2 claim owned by Valley High Ventures. The best intersection of the program was a 21-metre interval in hole L06-07 that graded 2.01% Cu and 0.68 g/t Au. Drilling west of the Boundary zone encountered interesting chalcopyrite-bornite mineralization lacking magnetite that will be further evaluated. A coincident chargeability high and magnetic anomaly in a physiographic low is a future drill target.

Valley High Ventures also completed a 30 line-kilometre IP geophysical survey on its **October-Dome** property. The tenure covers part of the historic Bullion pit and work there identified a copper-bearing monzonite sill.

Autry Combs completed a modest trenching program on the **Miracle** copper-gold prospect 10 kilometres west of Mount Polley.

Cross Lake Minerals Ltd collared a portal (Figure 4.14) and commenced drifting towards North zone mineralization at its dormant **QR** gold mine, located just north of the Quesnel River. The mine was previously owned and operated by Kinross Gold Corp. A total of 3733 kilograms (120 030 ounces) of gold was produced from the Main, West and Midwest zones between 1995 and 1998. The current measured and indicated resource contained in the Northwest, West and Midwest zones totals a calculated 670 500 tonnes grading 4.9 g/t Au (NI 43-101 compliant).

Mineralization at QR occurs in propylitically altered basaltic fragmental rocks, and in lesser siltstones, of the Late Triassic Nicola Group peripheral to an Early Jurassic diorite stock. Cross Lake has started a major underground exploration program focusing on the undeveloped North zone, a faulted deeper extension of the previously mined Main zone. Previous diamond drilling intersected the North zone over a strike length of more than 1000 metres, and at depths of between 300 and 450 metres. The planned 600 to 700 metre decline and cross-cut will enable Cross Lake to conduct detailed drilling of the zone and potentially add significant tonnage to the property's resource base.

Cross Lake received government approval in December to restart the mine and will begin work in the first quarter of 2007 with production scheduled for the summer. A 42-man camp has been constructed on site. The mine restart will include the stringing of about 30 kilometres of three-phase powerline from the Gavin Lake sub-station to the minesite, refurbishing of the mill and provision of all necessary rolling stock and mining equipment.

Skygold Ventures Ltd (70%) and partner Wildrose Resources Ltd (30%) completed a major exploration program to further examine bulk-tonnage gold mineralization on their **Spanish Mountain** property east of Likely (Figure 4.15). Low grade gold mineralization is preferentially hosted by two horizons of graphitic argillite-mudstone that are separated by a thick, mostly barren horizon of greywacke. The sedimentary rock package is part of the 'black clastic succession' that occurs at the base of the Quesnel Terrane. Early in the year a high resolution Dighem electromagnetic survey was flown over the property. The data may assist in delineating the favourable fine-grained graphitic sedimentary rocks from non-graphitic coarser-gained clastic rocks in areas of significant cover.

The property has been divided up into the North Main, Central Main and South Main zones. Most of the

26 000 metres of drilling systematically explored the Central Main zone, and the work has expanded the dimensions of the Central Main zone to 1200 metres by 450 metres. The core and reverse circulation drilling continued to confirm excellent continuity of bulk-tonnage gold grades (e.g. hole 06-DDH-519 intersected 51.5 metres averaging 1.39 g/t Au) with approximately 50% of the analyses reported. A limited amount of drilling took place on the other zones with encouraging results. Skygold Ventures plans to carry out an NI 43-101 compliant resource estimation of the Central Main zone in 2007.

A reconnaissance soil sampling program outlined a new zone north of Spanish Creek and north of the presently active area. A northwest–trending gold anomaly, with individual values up to 985 ppb gold, measuring 1500 metres by 300 metres encompasses the Oscar showing. Grab samples of quartz vein material from the Oscar showing assayed as high as 41.0 g/t gold. It will be further examined in 2007.

Nearby, Acrex Ventures Ltd evaluated similar style gold mineralization on its **Hepburn Lake** property. Geochemical sampling outlined an 800-metre by 1000-metre gold soil anomaly. Follow-up diamond drilling tested the anomaly, but results were not available.

Skygold Ventures acquired from Hunter Exploration Group a large block of tenure northwest of Spanish Mountain, called the **SHG** property. In 2006, Hunter conducted a reconnaissance scale exploration program consisting of geological mapping, prospecting and geochemical sampling. The tenure covers geology similar to Spanish Mountain.

Barker Minerals Ltd completed a trenching and drilling program on its **Frank Creek** volcanogenic massive sulphide property southeast of Cariboo Lake. Previous exploration has identified polymetallic, base metal sulphide mineralization in stringers and semi-massive bands within metasedimentary rocks of the Paleozoic Snowshoe Group. The 2006 exploration targets were defined by combined high chargeability and low resistivity geophysical anomalies and multi-element soil geochemical anomalies. Polymetallic sulphide stringer zones were encountered in several trenches and in drill core.

NovaGold Resources Inc optioned the **Shiko** alkalic porphyry copper-gold property, located north of Horsefly, from Rudy Durfeld. The company completed a modest geochemical sampling program.

South of Horsefly, Wildrose Resources and partner Fjordland Exploration Inc carried on with their evaluation of the **Woodjam** porphyry gold-copper property. Mineralization at Woodjam is associated with a subvolcanic quartz monzonite intrusion, part of the Late Triassic-Early Jurassic Takomkane batholith, in proximity to intermediate flows of the Nicola Group. Most of the 23-hole, 8000-metre diamond drill program targeted the southern extension of the Megabuck zone. Many of the

Figure 4.15. Drilling on the Spanish Mountain gold property.

holes successfully intersected the zone that typically began at depths of greater than 100 metres (e.g. hole 06-051 cut 208 metres averaging 0.55 g/t Au and 0.12% Cu starting at a depth of 168 metres). Late in the year a 526-metre drillhole tested the Takom zone near a previous intersection and within a coincident IP and geochemical anomaly. The company plans to resume drilling on the Takom target early in 2007.

Other companies active in the Horsefly area include Swift Resources Inc on the **Hen** gold property, Dajin Resources Corp on the **Cowtrail** gold-copper property and Eagle Peak Resources Inc on the **Peaks** gold-copper property. A small trenching program was conducted by Herb Wahl and brothers Jack and Jim Brown-John on their **Megaton** alkalic porphyry copper-gold prospect near Horsefly.

McLeese Lake Area

Taseko Mines Ltd conducted an extensive diamond drilling program at its **Gibraltar** mine site utilizing two drills through much of the year. Drilling took place in several areas peripheral to the Pollyanna and Granite Lake pits, but beyond the present pit designs. The program identified long intersections of copper and molybdenum mineralization that extend the lateral and vertical expression of each deposit. East of Pollyanna, hole 06-32 intersected 100.6 metres averaging 0.32% Cu and 0.019% Mo. West of Granite Lake, hole 06-35 intersected 108.8 metres averaging 0.61% Cu and 0.018% Mo. Results from 67 holes in the Granite Lake area were incorporated into a revision of the geological model for the deposit. The modeling exercise also took into account current mining cost projections, metal market information and updated pit wall optimization. The work outlined an additional 67 million tonnes of proven and probable ore grading 0.33% Cu and 0.011% Mo. The definition drilling program will continue well into 2007 and could further expand the mine's overall reserve base.

Copper Ridge Explorations Inc completed a modest drill program that targeted coincident IP chargeability and copper geochemical anomalies on its **Copper Ace South** property just a few kilometres north of the Gibraltar minesite. Two other nearby properties, **Sheridan** and **McLeese** cover significant copper targets and will be the subject of 2007 exploration programs by the company.

COAL EXPLORATION

West Hawk Development Corp proposed a major exploration program on its tenure that covers part of the important **Groundhog** anthracite coal property, located 370 kilometres northwest of Fort St. James. The intent of the program was to validate historical data and advance the coal resources into the measured and indicated categories for the Lower and Upper Discovery Seams. However, the project did not proceed because of a blockade that was established on the only access route to the property. Work in the early 1970s outlined a speculative coal reserve of approximately 980 million tonnes. Later, BC Hydro focused on identifying a 50-million tonne reserve that could support a 500 MW thermal power plant, while BCR began construction of the railway.

OUTLOOK FOR 2007

The level of activity in the region is expected to remain high through 2007 and may increase from that witnessed in 2006. Many junior companies are well-funded and budgets for future exploration programs are already in place.

Strong metal prices will ensure that the region's three operating metal mines are profitable. Reopening of the QR gold mine will provide approximately 40 more direct mining jobs in the Cariboo. Advancement of the Mt. Milligan project toward EA review and certification will set the stage for another major copper-gold mine development in late 2007/early 2008.

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SOUTH-CENTRAL REGION

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SUMMARY AND TRENDS

For the seventh straight year, exploration activity increased in South-Central BC. Spending on exploration is estimated at about $46 million, up sharply from the $35 million spent in 2005 (Figure 5.1). These spending levels reflect strong commodity prices, numerous financings, an overall robust exploration climate, and two very large projects at Kamloops which accounted for about 40% of the total. This level of expenditure sets a new all-time high for exploration in the South-Central Region.

Exploration activity continues to be led by junior companies which were responsible for virtually all of the region's investment. These companies are primarily targeting bulk-mineable copper-gold, copper-molybdenum and molybdenum porphyry deposits, high-grade gold-silver veins, and stratiform polymetallic massive sulphide deposits. Junior companies experienced a dramatic improvement in their ability to raise capital in various financings. Notable examples include New Gold Inc ($75 million raised) and Abacus Mining and Exploration Corp ($14.5 million).

Drilling activity was up substantially at about 175 000 metres (Figure 5.2). The number of major projects, *i.e.*, those with drilling or trenching and over $100 000 in spending, is estimated at 43, compared with 33 in 2005 (Figures 5.3 and 5.4, Table 5.2).

Several projects are undergoing advanced exploration, environmental review, permitting and feasibility studies and could enter production in the future. The most advanced are **New Afton** (copper-gold), **Elk** (gold) and **Prosperity** (gold-copper).

Several programs targeted relatively recent discoveries or significant extensions to known deposits. Recent discoveries that saw aggressive programs included **Skoonka Creek** (gold-silver), **Prospect Valley** (gold-silver), **Ruddock Creek** (Creek zone) (zinc-lead-silver), **Jake** (gold), **Blue River** (Upper Fir) (tantalum and niobium) and **LJ** (zinc-lead-silver). Known deposits such as the **Bralorne Mine** (gold), Ajax **West** (copper-gold), **Crazy Fox** (molybdenum-tungsten), **Ruddock Creek** (E-Zone) (zinc-lead-silver), **Panorama Ridge** (gold) and **Harper Creek** (copper-zinc) saw large programs aimed at expanding and discovering new resources.

Amongst the operating mines, the highlight of the year was the decision to extend the mine life to 2013 at **Highland Valley Copper**. In addition, the company is conducting engineering and feasibility studies on a

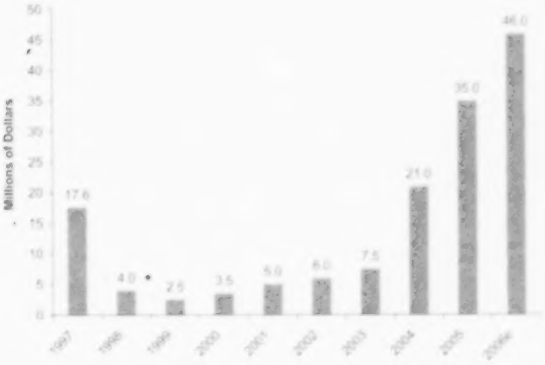

Figure 5.1. Annual exploration spending, in millions of dollars, South-Central Region.

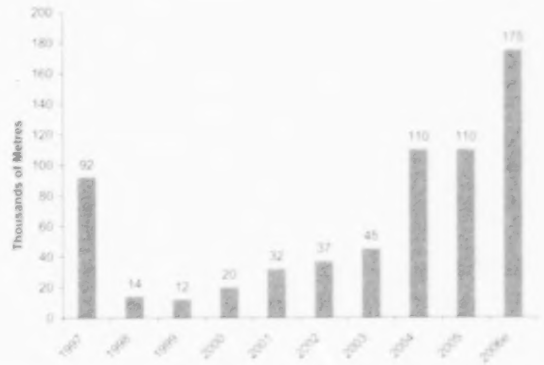

Figure 5.2. Annual exploration and development drilling, in thousands of metres, South-Central Region.

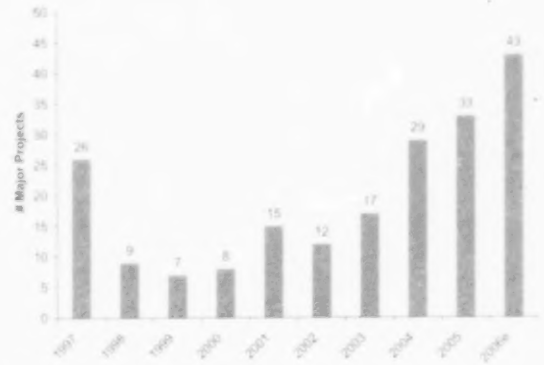

Figure 5.3. Number of major exploration projects per year, South-Central Region.

hydrometallurgical copper refinery which could further extend the mine life.

All of the operating mines in the region are listed in Table 5.1 and shown on the map (Figure 5.4). In addition, the major exploration projects are listed in Table 5.2.

MINES AND QUARRIES

METALS

Highland Valley Copper (HVC; Figure 5.5), a partnership of Teck Cominco Ltd (97.5%) and Highmont Mining Company Ltd (2.5%), benefited from exceptional copper and molybdenum prices in 2006. Employing about 900 people, the operation is forecast to produce close to $1.4 billion in revenue and $1 billion in operating profit for 2006. A decision was made to extend the mine life from 2009 to 2013, and further extensions are also being considered.

In October, the company and its unionized employees settled a collective agreement which covers a five-year period to September 30, 2011. Pre-stripping to allow a push-back of the Valley pit east wall has commenced and approximately 90 million tonnes of overburden and low-grade ore is expected to be mined mainly in 2008-2009. The re-location of the in pit crusher and conveyor is reported to be nearing completion.

Average daily mill throughput was slightly lower than the average of about 136 000 tonnes per day (or 50 million tonnes per year) in recent years due to harder ore and other operational issues. Copper production at HVC in 2006 is forecast to be about 161 000 tonnes, slightly

TABLE 5.1. SOUTH-CENTRAL REGION FORECAST MINE PRODUCTION, 2006

Mine	Operator	Deposit Type / Commodity	Forecast Production in 2006 (tonnes or kilograms)	Number of Employees	Proven and Probable Reserves (at Jan. 1, 2006)
Metals					
Highland Valley Copper	Teck Cominco Ltd / Highmont Mining Company Ltd	Calc-alkalic porphyry Cu-Mo	161 000 t Cu, 2000 t Mo, minor Au, and Ag	~900	318 700 000 t at 0.43% Cu and 0.008% Mo
Coal					
Basin	Compliance Energy Corp	Thermal coal	42 000 t	~20	
Industrial Minerals					
Ashcroft	IG Machine and Fiber Ltd (IKO Industries Ltd)	Basalt (roofing granules)		55 (plant & quarry)	
Bud	Absorbant Products Ltd	Bentonite		see Red Lake	
Buse Lake	Lafarge Canada Inc	Volcanic ash (alumina-silica)		see Harper Ranch	
Craigmont	Craigmont Mines Joint Venture	Magnetite tailings	90 000 t	~30 (plant, seasonal)	
Decor	Pacific Bentonite Ltd	Alumina, landscape rock		~2 (including trucking)	
Falkland	Lafarge Canada Inc	Gypsum		see Harper Ranch	
Harper Ranch	Lafarge Canada Inc	Limestone		32 (plant & 3 quarries)	
Kettle Valley quarries	Kettle Valley Stone Company	Ashlar, flagstone, thin veneer		~40 (plant & quarries)	
Pavilion	Graymont Western Canada Inc	Limestone		~34 (plant & quarry)	
Red Lake	Absorbant Products Ltd	Diatomaceous earth, leonardite		40 (plant & 3 quarries)	
Z-2	Industrial Minerals Processors	Zeolite		~3 (plant and quarry, intermittent)	

Figure 5.4. Mines, quarries and major exploration projects, South-Central Region.

TABLE 5.2. MAJOR EXPLORATION PROJECTS, SOUTH-CENTRAL REGION, 2006

Property	Operator	MINFILE (or NTS)	Commodities	Deposit Type	Work Program
Afton Area (West Ajax, East Ajax, DM, Audra)	Abacus Mining and Exploration Corp	92INE012, 013, 030	Cu, Au, Ag, Pd	Alkalic Porphyry	DD (~35 000 m)
Kamloops Gold	Williams Creek Explorations Limited / New Gold Inc	92I 086	Cu, Au	Alkalic Porphyry	DD (4048 m)
Ajax	New Gold Inc	92INE012, 013	Cu, Au	Alkalic Porphyry	DD (~2500 m)
Axe	Westar Resources Corp / Bearclaw Capital Corp	92HNE143, 040, 142	Cu, Au, Ag	Alkalic Porphyry	DD (1700 m)
Barnes Creek	Columbia Yukon Explorations Inc	82L/01W	Au, Ag	Epithermal Vein	DD (~800 m); TR (~1200 m)
Blackdome Mine (No 1 and 2 veins)	J-Pacific Gold Inc	92O 053	Au, Ag	Epithermal Vein	DD (~4000 m)
Blue River Tantalum/Niobium (Upper Fir, Fir and Verity)	Commerce Resources Corp	83D 005, 035	Ta, Nb, Phosphate	Carbonatite	DD (3400 m); EN; FS; G; MS; PF
Bralorne (New Vein - Noelton Vein, Shaft, Maud, Pioneer)	Bralorne Gold Mines Ltd	92JNE001	Au, Ag	Mesothermal Vein	DD (~10 000 m); FS
Congress (Lou, Howard, Golden Ledge)	Levon Resources Ltd	92JNE029, 131, 132	Au, Ag, Cu, Sb	Mesothermal Vein	DD (~2000 m)
Crazy Fox	Newmac Resources Inc	092P 014, 015, 016	Mo, W	Porphyry	DD (7490 m), TR (~1200 m)
Dobbin	Molycor Gold Corp / Goldrea Resources Corp	82LSW005	Cu, Pt, Pd	Magmatic; porphyry?	DD (1750 m)
Empire	American Creek Resources Ltd		Au, Ag	Vein, porphyry	AB-MG; AB-RD (1070 km); P; GP; G
Elk (Siwash North)	Almaden Minerals Ltd	92HNE096	Au, Ag	Mesothermal Vein	DD (8874 m); TR (300 m); GC; EN; PF
Fox 1-21 (Deception)	Happy Creek Minerals Ltd	none	W, Mo, Zn, Au	Skarn	GC; G; TR (~1650 m)
Galaxy	Discovery-Corp Enterprises Inc	92INE007	Cu, Au	Alkalic Porphyry	G; GC; DD (286 m)
Harper Creek	Yellowhead Mining Inc	82M 009	Cu, Ag, Au, Zn, Mo	Stratiform disseminated	DD (~5000 m); GP-IP (45 km); GC; G
Highland Valley Mine	Highland Valley Copper	92ISW012, 045, 92ISE013	Cu, Mo	Porphyry	DD (6482 m)
Iron Lake	Argent Mining Corp / Eastfield Resources Ltd	92P 132	Cu, Au, Pd, Pt	Magmatic PGE	UT; DD (680 m)
Irony	Jasper Mining Corp			Sedex	DD (400 m); AB-EM; AB-MG (564 km); GC
Isintok Lake	Jasper Mining Corp.	82ENW093	Ag, Cu, Mo	Porphyry	DD (~5000 m); IP (16 km); GC
Jake, CLO	Rimfire Minerals Corp		Au	Porphyry / Mesothermal vein	GP-EM; VLF; GC; TR (~1000 m)
Jamieson - Bullion	American Creek Resources Ltd				DD (~1000 m)
Tulox (Joe)	Amarc Resources Ltd		Au	Vein?	GC; IP (36.5 km)

TABLE 5.2. CONTINUED

Property	Operator	MINFILE (or NTS)	Commodities	Deposit Type	Work Program
Ketchan	Copper Belt Resources Ltd	92HNE115, 118	Cu, Au, Ag	Alkalic Porphyry	DD (~2000 m)
Lac La Hache (Aurizon, Peach Lake, Peach Melba, Ann North, Spout Lake, North and South Zones)	GWR Resources Inc	092P 001, 002, 034, 035, 108, 120, 153			TR; DD (~6000 m)
LJ	Consolidated Venturex Holdings Ltd	82M 264	Zn, Pb, Cu, Au, Ag	Besshi VMS	G; DD (1500 m)
Murphy Lake	Candorado Operating Co Ltd	93A 044, 073, 113, 063, 92P 004	Cu, Au	Alkalic Porphyry	DD (800 m); IP, AB-RD, AB-MG, GC
New Afton	New Gold Inc	92INE023	Cu, Au, Pd, Ag	Alkalic Porphyry	CD; FS; EN; GD; MS; PF; DD (~30 000 m)
Newmac, Bluff	Newmac Resources Inc	92N 030, 054, 055, 021?	Cu, Ag, Au	Porphyry, vein	DD; IP
Newton Mountain	High Ridge Resources Inc	092O050	Cu, Au	Porphyry	DD (2019 m); TR (3000 m)
Nicoamen River	Tanqueray Resources Ltd / Almaden Minerals Ltd		Au, Ag	Epithermal vein	GC; TR (425 m)
Panorama Ridge	Goldcliff Resource Corp	82ESW052, 259	Au	Skarn	DD (2213 m); TR (1450 m)
Princeton Project	Anglo-Canadian Uranium Corp	092HSE033	Cu, Au, Pd, Ag	Porphyry	DD (~1500 m)
Prospect Valley (NIC)	Consolidated Spire Ventures Ltd / Almaden Minerals Ltd	none	Au, Ag	Epithermal Vein	GP; DD (1500 m)
Prospect Valley (RM, RMX)	Consolidated Spire Ventures Ltd	92ISW105(?)	Au, Ag	Epithermal Vein	GP (48 km); DD (3734 m)
Prosperity	Taseko Mines Ltd	92O 041	Cu, Mo, Au	Porphyry	FS; EN;
Rain (Sorcerer)	International Bethlehem Mining Corp	82M 156	Cu, Mo, W	Skarn	AB-EM; AB-MG (590 km); DD (800 m)
Rateria	Happy Creek Minerals Ltd	92ISE092, 150, 060	Cu, Mo	Calc-alkalic porphyry	DD (~3000 m)
Red Hill	Avalon Ventures Ltd	92INW042	Cu, Zn, Au, Ag	VMS	DD (1120 m); G; GP
Ruddock Creek (E Zone, Creek Zone)	Selkirk Metals Corp / Doublestar Resources Ltd	082M 084	Zn, Pb, Ag	Stratiform	DD (14 551 m); AB-EM; AB-MG; GP; GC
Skoonka (JJ, Discovery)	Strongbow Exploration Inc / Almaden Minerals Ltd	92ISW104, 105	Au, Ag	Epithermal Vein	DD (4500 m); AB-GP; GP; GC; G; TR
Spences Bridge (Mag/LP, Silk, Southern Belle, Inn, Shovelnose)	Strongbow Exploration Inc		Au, Ag	Epithermal Vein	GC, G, Prosp.
Stirrup	Anglo-Canadian Uranium Corp		Au	Epithermal Vein	DD (~3000 m)

Work Program Abbreviations:
A = access; trail; road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; OP-BU = open-pit bulk sample; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching; UG (X m) = X metres of underground development; UG-BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)

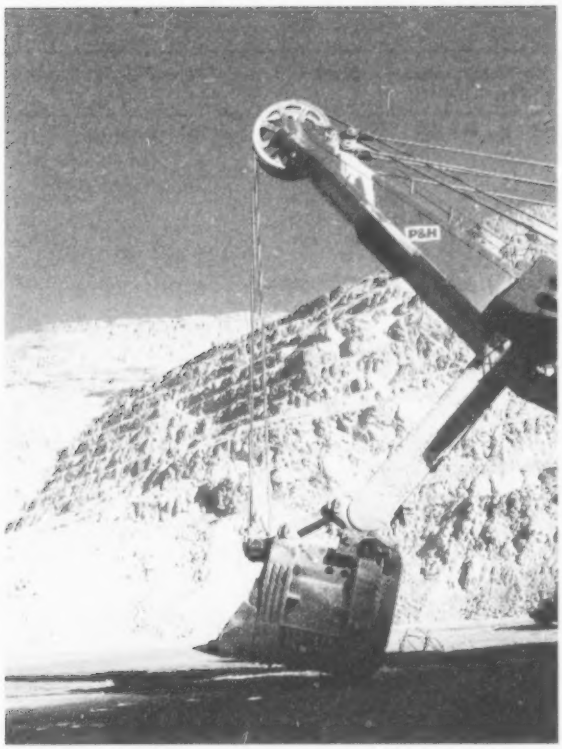

Figure 5.5. A shovel in the Valley pit, Highland Valley Copper.

lower than 2005, while molybdenum production will be about 2000 tonnes which is down almost 1/3 from 2005 due to lower ore grades realized during the year. The mine also produces minor by-product gold and silver.

Most ore comes from the **Valley** pit, augmented by a small amount from the **Lornex** pit. The **Highmont East** pit re-opened in 2005 due to its higher molybdenum content and elevated metal prices. It is expected to contribute important production during the 2008-2009 transition period in the Valley pit when higher strip ratios and lower grades are anticipated.

A proposed push back of the Valley pit west wall (2017 mine-life extension) and development of a $500 million onsite hydrometallurgical copper refinery are the subject of feasibility studies. The refinery study is expected to be concluded at the end of 2006. The copper refinery proposal is currently in the pre-application stage of the Environmental Assessment process, and an application is expected to be presented in July, 2007.

Several other mine-mill complexes remain on care-and-maintenance status. Many of these have been closed since the mid-1990s, awaiting higher metal prices and/or discovery of additional ore. They have permits and substantial infrastructure in place and represent excellent opportunities for renewed mining or custom milling. These complexes include the **Goldstream** copper-zinc, **Blackdome** gold-silver, **Bralorne** gold and **Similco** copper-gold mines. Efforts at bringing these mines back into production are discussed in latter sections.

COAL

Located near the town of Coalmont, the small **Basin** thermal coal mine of Compliance Energy Corporation produced about 42 000 tonnes in 2006. The site was placed on seasonal care and maintenance status in early September. The high volatile, bituminous B and C rank coal is sold mainly to cement plants and other niche markets in southern BC. The company's subsidiary, Compliance Power Corporation, was awarded a 30 year electricity purchase agreement in July from BC Hydro and is proposing a 56-megawatt coal and wood-waste fired generating station at the former Similco mine site. Called the Princeton Power project, the thermal generating station would burn coal from the Basin mine along with wood waste from a variety of forest industry sources. The reported project development costs are $200 million with 30-40 full time jobs created on an ongoing basis. The project entered the pre-application stage of the Environmental Assessment process in March 2006.

INDUSTRIAL MINERALS

There are more than fifteen industrial mineral quarries and processing plants employing over 250 people in the region. These operations provide stable jobs in many small to medium-sized communities including Kamloops, Kelowna, Lillooet, Cache Creek, Ashcroft, Princeton and Merritt. There are very good opportunities for additional growth in this sector due to the wide variety of rock types and deposits in the region, excellent transportation infrastructure, proximity to growing markets in western North America, and the relative ease of permitting.

The **Kamloops** cement plant and **Harper Ranch** limestone quarry of Lafarge Canada Inc continue to supply cement to meet due to strong demand in western Canada. Lafarge also draws materials from the **Falkland** and **Buse Lake** quarries, which provide gypsum and alumina-silica rock respectively.

The **Decor** pit of Pacific Bentonite Ltd supplies alumina-rich burnt shale to the Lafarge cement plant in Kamloops (Figure 5.6). The shale beds occur directly above the Hat Creek coal deposit, located west of Cache Creek. Although most of the material is sold to Lafarge, a few thousand tonnes were also sold for surfacing of baseball diamonds. The property is also known to host a large bentonite deposit which is being investigated for municipal engineering and tile manufacture applications.

Also near Cache Creek, Graymont Western Canada Inc operates the **Pavilion** limestone quarry and lime plant on the Pavilion Indian Reserve. Graymont recently signed a forty-year lease extension with the Ts'kw'aylaxw First Nation who form the bulk of the employees at the mine.

Figure 5.6. The Decor alumina shale pit of Pacific Bentonite Ltd.

The company is studying the feasibility of a change in the mining system to permit long term mining at the site.

East of Ashcroft, IG Machine and Fiber Ltd, a subsidiary of IKO Industries Ltd, operates the **Ashcroft** basalt quarry and roofing granule plant (Figure 5.7). The granules are sized and coated with one of several distinct colours on site, and then shipped by rail and truck to IKO asphalt shingle plants in Calgary, Alberta; Sumas, Washington; Chicago, Illinois and elsewhere in North America.

Craigmont Mines Joint Venture operates the **Craigmont** magnetite operation located near Merritt where tailings from the old Craigmont copper mine are processed. The plant normally operates on a seasonal basis (March to December), however, due to strong demand, processing may continue through the winter months. The magnetite is used in coal washing plants in western Canada and the Centralia mine in Washington State. Remaining tailings are forecast to be exhausted in just over two years, and the company is evaluating several other possible feed sources.

At its plant in Kamloops, Absorbant Products Ltd manufactures cat litter, barn deodorizer, industrial absorbents, and carriers for agricultural products. These are prepared from diatomaceous earth mined from the **Red Lake** quarry northwest of Kamloops, and bentonite mined from the Bud quarry at Princeton.

The **Z1** (Ranchlands) zeolite quarry near Cache Creek is a small intermittent producer. Heemskirk Canada Ltd continues to market agricultural and absorbent products, produced from stockpiled zeolite at its plant in Lethbridge, Alberta.

Zeolite was mined from the nearby **Z2** quarry for processing at a plant in Ashcroft. The quarry and plant are owned by Industrial Mineral Processors, a private company based in Calgary. The plant produces industrial absorbents for oil field clean-up, soil conditioner, barn deodorizers, feed binders, and cat litter. The company plans to relocate the plant from Cache Creek to the mine site.

Figure 5.7. The roofing granule plant of IG Machine and Fiber Ltd at Ashcroft.

At Princeton, Zeo-Tech Enviro Corp optioned the **Zeo-Tech/Bromley Creek** zeolite quarry to Heemskirk Canada Ltd who will operate the quarry for the next four years. Zeolite will be transported to Lethbridge and prepared for use as a lightweight cement for oil and gas wells. This agreement will allow Zeo-Tech Enviro Corp to advance its efforts at the nearby **Sun** zeolite deposit.

Opal Resources Canada Inc produces attractive fire opal gemstones and jewelry from the **Klinker** property, located west of Vernon. Opal occurs as fracture and vesicle-fillings in andesitic to basaltic laharic breccia of the basal Kamloops Group (Eocene). Presently the gemstone jewelry is marketed from a retail store in Vernon and is aimed at the BC tourist market; however, the company aims to develop other North American markets (Figure 5.8).

Figure 5.8. A variety of opal specimens from the Klinker deposit (photo courtesy of Opal Resouces Canada Ltd).

Decorative rock and dimension stone are produced at numerous small quarries throughout the region. The best known producer is the Kettle Valley Stone Company of Kelowna which sells flagstone, ashlar, facing stone and landscape rock mined from the **Nipple Mountain**, **Kettle Valley**, **Canyon** and **Gemini** quarries. Kettle Valley's workforce has grown to about 40 people year round, mainly employed in the Kelowna processing facility. The products include dacite ash, gneiss and basalt, and are mainly used in high-end residential and commercial developments in the western U.S.A. and in the Vancouver-Whistler area.

South of Revelstoke, D.G. Olsson produces, by hand, small amounts of micaceous-quartzite flagstone and facing stone at the **Begbie** quarry. Other small, hand-operated flagstone quarries exploit micaceous quartzite in the North Thompson area.

EXPLORATION HIGHLIGHTS

KAMLOOPS-HIGHLAND VALLEY

Strong prices for copper, molybdenum and gold have focused exploration interest on the productive porphyry-hosting districts of southern BC, particularly the Guichon Creek and Iron Mask batholiths.

Iron Mask Batholith

The largest exploration project in the region was the **New Afton** porphyry copper-gold project of New Gold Inc (Figure 5.9). New Afton is located on the northwestern end of the Iron Mask Batholith and centered on the former Afton open-pit mine site, ten kilometres west of Kamloops. New Gold Inc raised over $75 million in February, providing a sizeable treasury for advancing this project. A large contingent of staff and contractors worked on the site throughout the year and about $14 million will be spent. Approximately 30 000 metres of surface and underground drilling was completed.

In the third quarter the results of a mining method study were released that indicated the optimal mining method to be underground block caving. As well, a new resource estimation was completed that increased the company's confidence in the nature and grade of the deposit with 70% of the tonnage being placed in the measured category. The resource now stands at 65.66 million tonnes grading 1.02% copper, 0.77 g/t gold and 2.59 g/t silver at a cash cutoff of $10 cdn/tonne. This estimate did not incorporate some of the significant deep drilling results attained from the "C-Zone" during the 2006 exploration season. This new area of mineralization has been identified vertically below the current resource, with intersections of up to 1.70% copper, and 1.47g/t gold, or 2.70% copper equivalent, over a core length of 112 metres as reported in hole UA-69.

Figure 5.9. Geologists discussing the underground mine development for the proposed New Afton mine.

The company is quickly advancing the project towards a decision on whether to construct a large underground mine, perhaps as early as 2009. Much of the work this year was aimed at the completion of a full feasibility study by the end of year. This will include capital and operational costs, an economic model, metallurgical test work, infrastructure engineering, reserve calculation and permitting. The proposed mine would achieve a full production rate of 11 000 tonnes per day after mill commissioning in 2009. De-watering of the Afton pit is proposed to begin in 2007 in preparation for underground development which would be completed in 2008. A 5 kilometre decline would access the ore body and conveyor that would bring the ore to the surface. The capital investment is estimated at $250 million and would provide 400 jobs during construction and 200 during operation. The mine life is predicted to be 12 years with the present resources. An application for a Mines Act permit was made to the Regional Mine Development Review Committee in December. Environmental review and permitting is expected to be complete in early to mid 2007.

New Gold Inc was also active in the central region of the Iron Mask Batholith where they drilled several thousand metres around the **Ajax** pits and the recently optioned **Magnum** property. The **Ajax** East and West pits provided mill-feed to the Afton concentrator prior to

closure in 1997 and are located about 10 kilometres southeast of the Afton mine site.

Abacus Mining and Exploration Corp also holds a large property position in the **Afton area** of the Iron Mask Batholith and conducted a very large drill program during the year. The company is implementing a deal to purchase milling and processing facilities, a tailings storage facility, and certain surface and subsurface rights, permits and infrastructure from Afton Operating Corp, a subsidiary of Teck Cominco Ltd. These aggressive undertakings have been made possible in part by two very successful financings in February whereby the company raised $14.5 million dollars.

Throughout the year Abacus continued drilling beneath the past-producing **Ajax West** and **East** pits bringing the total drilling at the pits to well in excess of 30 000 metres since late 2005 (Figure 5.10). Select highlights from 2006 drilling at the Ajax West included drillholes AW-06-025 which intercepted 291 metres of 0.47% copper and 0.52 g/t gold and AW-06-039 which intercepted 492 metres of 0.34% copper and 0.30 g/t gold. Utilizing information from this program the company is proceeding with a resource estimation for the Ajax West pit which should be completed before the end of the year.

Continued drilling is underway at the Ajax East pit in order to provide enough information for a resource estimate to be completed.

Abacus Mining and Exploration Corp also drilled the and **DM-Audra-Crescent** zones, which are located between the Afton and Ajax deposits, with the intention of expanding the preliminary resources below and on strike to the known mineralization. Existing indicated resources in these zones total 28.5 million tonnes grading 0.30% copper and 0.15 g/t gold and an inferred resource of 15.8 million tonnes grading 0.28% copper and 0.124 g/t gold.

The small **Kamloops Gold** property of Williams Creek Exploration Ltd was also explored in a joint venture with New Gold Inc and saw a five long holes drilled to test geophysical anomalies identified by a natural audio frequency magnetotellurics ("NSAMT") survey conducted in 2005. The Company encountered short intersections of mineralization and is reviewing the program results in order to better understand their significance in anticipation of further drilling.

The **Galaxy** property held by Discovery-Corp Enterprises Inc was explored by a modest program of three shallow drillholes totaling 286 metres. Within this property the Galaxy copper-gold zone is a northwest-trending, fault-bounded dioritic pendant of the Iron Mask batholith. A selection of reported near surface intercepts from limited sampling include 12.47 metres of 0.72% copper and 0.46 g/t gold from hole GX06-1 and 6.08 metres of 0.83 % copper and 0.23 g/t gold from hole GX06-2. An historical resource estimate for this deposit totals 3.2 million tonnes grading 0.65% copper and 0.34 g/t gold.

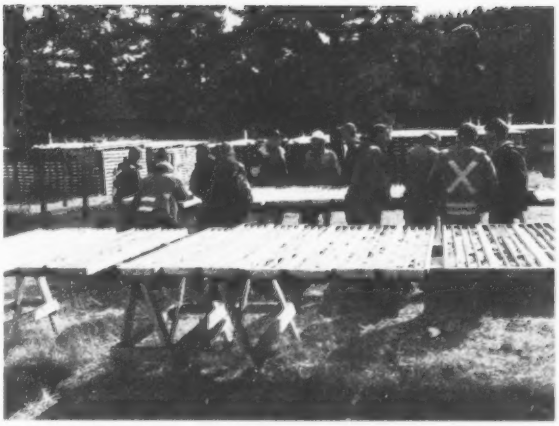

Figure 5.10. A "deep porphyry" mine tour examining Ajax West core at the Afton project of Abacus Mining and Exploration Corp.

Guichon Creek Batholith

In the Highland Valley, Getty Copper Inc continued its evaluation of the potential for on-site leaching of oxide ore at the **Getty North** porphyry copper deposit. The company reported a successful pilot plant test of the ore utilizing a proprietary Continuous Vat Leaching process at SGS Lakefield Research. The results of the test will provide the design parameters for a full-scale plant. As well, the company is working toward bringing the stated resources for the deposits it owns in the area into compliance with new reporting standards. Getty North has a historic drill indicated and inferred resource of 72.1 million tonnes grading 0.31% copper, including 10.0 million tonnes of oxide grading 0.40% copper.

South of the Highland Valley Copper mine, Happy Creek Minerals Ltd drilled the **Rateria** property to test a porphyry copper-molybdenum target generated by three-dimensional induced polarization survey completed in 2005. At the time of writing analytical results were not available; however, the company has reported encountering quartz diorite to granodiorite and various dikes believed to be the Bethlehem and Skeena phases of the Guichon Creek Batholith which are the host rocks at the Lornex and Bethlehem mines to the north.

North of Kamloops on the southern Bonaparte plateau, American Creek Resources Ltd has acquired a very large land holding on the **Jamieson-Bullion** and **Empire** properties. This land package is underlain largely by Devonian to Triassic Harper Ranch and Upper Triassic Nicola Group rocks that have been intruded by Late Triassic to Jurassic granodiorite to quartz diorite plugs. A ten-hole program is underway at the Jamieson-Bullion property where historically the targets have been multi-element quartz veins in shear zones developed within intrusive rocks. The Empire property was over-flown by an airborne radiometric and magnetic survey covering a total of 1070 line kilometres and follow-up ground magnetic and geological surveys were completed.

NORTH THOMPSON

South of Blue River near the headwaters of the North Thompson River, Commerce Resources Corp undertook a large program at its Blue River tantalum-niobium properties (Figure 5.11). Bolstered by two financings in 2006 that raised over $4.8 million the company is aggressively advancing this project. The company drilled 17 holes at the **Upper Fir** carbonatite intersecting it over intervals of 12.53 to 105.87 metres in thickness over a strike length of 750 metres. Results are pending but the first hole reportedly intersected 81.61 metres grading 220 g/t Ta_2O_5 and 1,603 g/t Nb_2O_5. The company has begun environmental and economic scoping studies and intends to apply for a bulk sample in early 2007 in order to provide material for metallurgical and marketing studies. Commerce Resource Corp also owns the nearby **Fir** deposit, with an indicated resource of 5.65 million tonnes grading 203 g/t Ta_2O_5 and 1047 g/t Nb_2O_5 and the **Verity** deposit, located 10 kilometres north, with a resource of 3.06 million tonnes grading 196 g/t Ta_2O_5, 646 g/t Nb_2O_5 and 3.2% P_2O_5.

Newmac Resources Inc completed a large trenching and drilling program on the **Crazy Fox (Anticlimax)** porphyry molybdenum-tungsten property north of Little Fort (Figure 5.12). The program was aimed at defining the controls on mineralization and demonstrating its continuity. Select reported intersections include a lengthy 353 metres of 0.02% molybdenum and 0.071% tungsten in hole 06-19 and high-grade intersections such as 45.4 metres of 0.067% molybdenum and 0.040% tungsten in hole 06-31. These long intersections suggest the potential for a large, low-grade bulk-mineable deposit.

There was a substantive program at the **Harper Creek** copper deposit located 10 kilometres southwest of Vavenby, by private company Yellowhead Mining Inc. Tabular shaped zones of volcanogenic sulphide mineralization are hosted within highly deformed Late Devonian metavolcanic rocks of the Eagle Bay assemblage. The company's objective was to confirm the results of earlier Noranda/US Steel work through re-drilling of previously explored areas as well as step-out and infill drilling. Historic geological resources were

Figure 5.11. Hand specimen showing tantalum and niobium-bearing pyroclore within carbonatite at the Blue River Tantalum-Niobium project (courtesy of Commerce Resource Corp).

Figure 5.12. Unidirectional Solidification Texture quartz or "brain rock" from the Crazy Fox porphyry molybdenum-tungsten project (courtesy of Newmac Resources Inc).

estimated at 96 million tonnes of 0.41% copper and 0.05 g/t gold. Precious metals were only sampled on a limited basis in the past, so that is an important component of the current program and the company is re-sampling available core to confirm grades and mineralogy.

Rimfire Minerals Corporation conducted a VLF-EM survey followed up by trenching at the **Jake** property, a 2005 gold discovery located west of Clearwater. Trenching of the original showing revealed a series of gold-bearing quartz-sulphide veins and stringers hosted by sheared andesite tuffs of the Devonian to Permian Fennell Formation. Mineralization consists of quartz with pyrrhotite, chalcopyrite, pyrite and bismuthinite. Composite samples across the veining in the trench averaged 9.9 g/t gold over an average of 0.8 metre (4 samples), 7.3 g/t gold over 2.67 metres, 6.3 g/t gold over 2.09 metres, 11.7 g/t over 0.45 metre and 11.4 g/t gold over 0.60 metre. Further trenching is planned. The company has recently acquired the adjacent Clearwater Peak property to cover the northerly extension of the VLF-EM conductor associated with the Jake showing.

SOUTHERN CARIBOO-CHILCOTIN

Exploration for porphyry copper-gold deposits was the focus of most work in the Cariboo-Chilcotin in 2006. Several initiatives were launched aimed at identifying new opportunities in this region including: an airborne multi-parameter geophysical survey covering a 8900 square kilometre part of the Bonaparte Plateau south of Canim Lake (092P East 1/2) coordinated by Geoscience BC (Figure 5.13); regional geoscience studies in areas affected by Mountain Pine Beetle by the BC Geological Survey; a July 7, 2006 release of drainage sediment and water sampling program results (NTS Sheets 93C and 93F) by Geoscience BC; and studies at the University of British Columbia aimed at characterizing the Chilcotin flood basalts which obscure much prospective geology of

Figure 5.13. Helicopter at Little Fort ready to start airborne multi-parameter geophysical surveys over the Bonaparte Plateau.

the region. Cumulatively, the vast quantities of information gathered and released in 2006 and 2007 should provide a significant step toward a better understanding of the mineral opportunities in this part of the province.

The most significant deposit in this area is the **Prosperity** porphyry gold-copper deposit of Taseko Mines Limited, located southwest of Williams Lake. The most recent information from the company gives an estimated measured and indicated resource of 491 million tonnes grading 0.43 g/t Au and 0.22% copper. The company reports the update of the feasibility study for the project is progressing with the completion of scoping level studies for the mill redesign and operating costs as well as optimal designs of the tailings impoundment system and mining and other infrastructure costs. Discussions with area First Nations are underway and the Environmental Assessment process has been re-started with a focus on updating baseline studies in the biophysical, socio-economic, archeological, and traditional use fields.

Approximately 40 kilometres north of the Prosperity deposit, High Ridge Resources Inc completed a drill program on the **Newton Hill** porphyry gold-copper prospect. Notable intersections of gold mineralization were encountered in oxidized felsic rocks with reported intersections such as 2.33 g/t gold and 0.15% copper over 49 metres in hole DDH 06-12 and 1.07 g/t gold over 10 metres found almost at the surface in hole DDH 06-11. Follow-up trenching and drilling of the near-surface gold mineralization is planned.

Near Bluff Lake, further west in the Chilcotin, Newmac Resources Inc drilled the **Newmac** porphyry copper-silver-gold prospect. Results from that program have not been released yet. Adjoining the Newmac property is a recent discovery by a local rancher of copper-stained outcrops on what is now called the **Bluff** property. The company optioned the property and reports that malachite and azurite-stained and tourmaline-altered subvolcanic rocks have been discovered over an area of 900 by 600 metres. Grab samples yielded highly anomalous values with up to 5.46% copper, 8.75 g/t gold and 0.30% molybdenum. An IP program has been quickly arranged to provide some early direction on potential follow-up targets on this property.

The **Blackdome** gold-silver mine and mill of J-Pacific Gold Inc is located northwest of Clinton and remains on care and maintenance. This underground mine operated in the 1980s and again briefly from October 1998 to May 1999. Mineralization consists of narrow, high-grade epithermal quartz veins. The 200 tonne-per-day mill is intact and the property has a historic inferred mineral resource of 124 120 tonnes grading 12.8 g/t gold and 33.7 g/t silver. The property was drilled late in 2006 in a program aimed at identifying more resources and re-opening the operation. Much of the drilling was planned to test the No. 1 and 2 veins' continuity to depth, along strike and in an area where they may intersect. Drilling was also planned underneath Blackdome Mountain (a basalt cap rock) to intersect the No.1 and 17 veins in an area not previously tested. The final target is the Giant Vein which was drilled to test its down dip potential. Results of the program are pending.

West of Clinton at the **Stirrup** property, Anglo-Canadian Uranium Corp proposed a late fall program to drill test epithermal gold-sulfide-quartz veins hosted within marine sedimentary rocks of the Lower Cretaceous Jackass Mountain group. Previous drilling in the area by Chevron Minerals intersected 14.99 g/t gold over 1.1 metres.

At the **Lac La Hache** porphyry copper-gold property of GWR Resources Inc the main focus was to drill test identified priority targets generated by a 2005 airborne magnetic-radiometric survey that covered the property. Early in the year the Peach Lake, Peach Melba, Ann North and Spout Lake (North and South) zones were drilled. The fall portion of the drilling program began at the Aurizon zone of the Ann property where several holes targeted native copper mineralization exposed in trenches. The company reported its first hole AZ-06-01 intercepted 0.439 g/t gold and 0.223% copper over 257 metres with a high-grade section of 0.563 g/t gold and 0.28% copper over 80 metres. The company is well-financed to continue drilling and trenching into the winter season.

Further east, the **Iron Lake** magmatic copper-nickel-platinum prospect was drilled by Argent Mining Corp after targets were refined with a ground-based UTEM geophysical survey. The most successful hole was IL-06-05 which intersected 2.2 metres of nearly massive pyrrhotite-chalcopyrite mineralization grading 0.54% copper and 31.8% iron with anomalous nickel and cobalt. No economically significant intersections of gold or platinum were reported in this program.

Happy Creek Minerals Ltd was active on their portfolio of properties in the south Cariboo region. At the **Silverboss** property adjacent to the former Boss Mountain molybdenum mine, the company explored gold and

silver-bearing, fracture-controlled and sheeted quartz veins within the Takomkane batholith. East of Boss Mountain the **Fox** property, which contains the **Nightcrawler-Creek** tungsten skarn zone, was evaluated by property wide grassroots exploration for molybdenum, tungsten and gold.

There are some very large tenure holdings in the Bonaparte plateau that may benefit from the Geoscience BC airborne survey flown in the fall of 2006, with data scheduled for release in Spring 2007. These include the **Tulox** property of Amarc Resources Ltd and the **Murphy/Canim/South Canim Lakes** and **Rayfield** properties of Candorado Operating Company Ltd. These properties saw grassroots level exploration programs this year.

GOLD BRIDGE

The most advanced project in the famous Gold Bridge mesothermal gold-quartz vein camp is at the **Bralorne** mine of Bralorne Gold Mines Ltd which operated continuously from 1928 to 1971 and was the dominant contributor to the approximately 4.15 million ounces of gold that came from this camp. The mine received a Mine Development Certificate in 1995 and has completed some limited test milling in recent years. In addition to the underground workings, infrastructure on the property includes an assay lab, mine offices and dry, a partially completed tailings pond and a small gravity/flotation pilot mill with a capacity of about 100 tonne-per-day. The company recently commissioned an updated technical report to outline the necessary path for delineating reserves with the goal of identifying an optimized mining and mill configuration and reopening the mine.

In 2006 the company undertook a 10 000 metre surface and underground drill program aimed at confirming and extending geological structures and establishing guides for subsequent drifting and raising to increase tonnage and grade. Encouraging results are reported from work on Maud's structure, located 1000 feet southwest of the Peter Vein, and a previously undrilled target. Eight of 14 holes returned results that were greater than 5.3 g/t which are thought to be better than those from historical drilling of the Peter Vein. Holes also targeted the "New Vein-Noelton Vein" and extensions of structures from the King Mine area. Hole SB-06-109B intersected 15.87 g/t over 0.61 metres on an eastern projection of the "Shaft Vein" which included bonanza-grade sections of 402.58 g/t over 0.34 metres and 246.99 g/t over 0.37 metres further down-hole. These intersections are considered by the company as very significant as they occur in the King-Bralorne Mine gap: an area which hosts favorable Bralorne Intrusive rock and seen only limited previous exploration.

Work will continue through the winter at the property with the next phase involving rehabilitation of the King drift to allow underground drilling to further test the area around hole SB-06-109B. Drilling is also expected in the Pioneer area in the new year.

The **Congress** gold property of Levon Resources Ltd is located 11 kilometres north of the Bralorne mine and on the north side of Carpenter Lake. The property has had some mining and substantial exploration between 1913 and 1989 including six adits with over 2300 metres of underground workings. The 2006 drilling program was aimed at increasing the known resources at the **Lou** and **Howard Zones** to a minimum of 500 000 contained ounces of gold. The **Golden Ledge** zone, discovered by trenching in 2005, was drilled and early reports indicate the mineralized target was successfully intersected in all planned holes. Trenching had previously exposed a 1 to 1.5 metre wide silicified fault-zone with up to 26.4 g/t gold over 1.2 metres.

Near the Congress property, Avino Silver & Gold Mines Ltd drilled a few holes on the **Minto** property. The targets were generated from a previous year's trenching program which returned up to 14.76 g/t gold over an estimated true width of 4.5 metres in trench #827 on the Minto North Zone.

OKANAGAN-SOUTHERN MONASHEES

Porphyry molybdenum deposits and gold-quartz vein deposits were the main exploration targets in the Okanagan in 2006.

The **Elk** (Siwash North) mesothermal gold-quartz vein project of Almaden Minerals Ltd is located 45 kilometres southeast of Merritt, and just 2 kilometres south of Highway 97 (Figure 5.14). Between 1992 and 1995 the mine produced 1609.6 kilograms gold (51 750 ounces) from 16 700 tonnes of direct-shipping ore from open-pit and underground workings on the **Siwash North Vein (B Zone)**. Grades averaged about 96 g/t gold. Almaden Minerals Ltd owns a 110 tonne-per-day, modular, gravity-flotation mill and is aggressively working toward expanding the known resource on the property and putting the project into commercial production in the next few years.

The busy year at the Elk property started with the release of an updated resource estimate for the **B Zone** and **WD Vein** property. Global (bulk open pit and vein) measured and indicated resources totaled 846 000 tonnes grading 10.48 g/t gold (285 100 ounces) plus an additional 1.0945 million tonnes grading 5.36 g/t gold (188 400 ounces) in the inferred category. The bulk of the 2006 program was focused on infill drilling at the WD Vein which is located 200 metres north of the Siwash Vein. Four holes were drilled in the **Siwash East Zone** and 17 into the B Zone. There are eight known mesothermal vein structures on the property many of which are recent discoveries that warrant further exploration.

Molycor Gold Corp and Goldrea Resources Corp were active on their properties around the Whiterocks

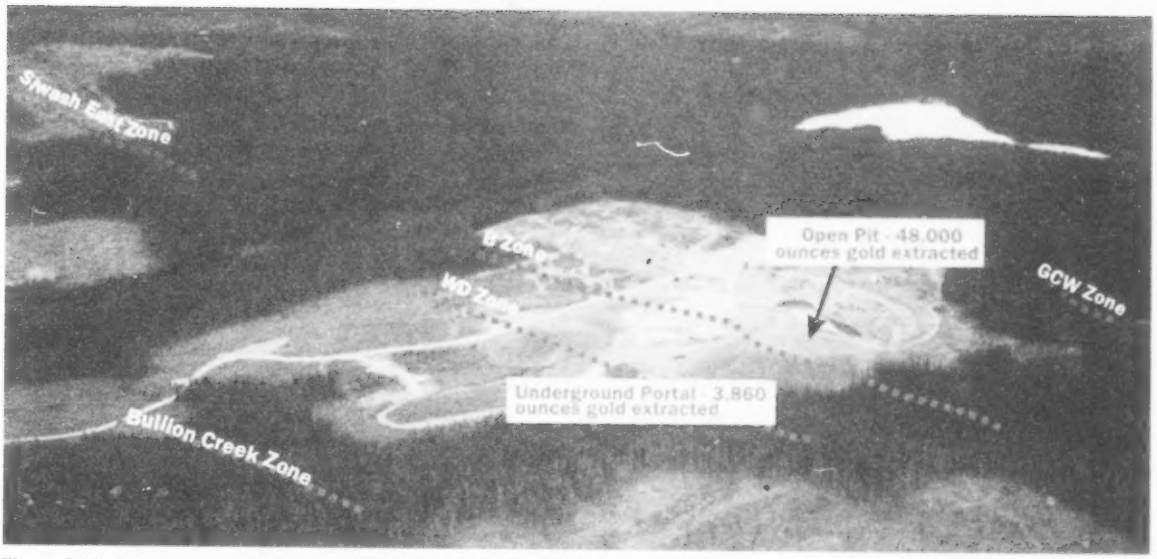

Figure 5.14. Aerial view of the Elk property showing the various zones, open pit and portal locations (courtesy of Almaden Minerals Ltd).

Mountain alkaline complex, located 23 kilometres northeast of the Brenda mine and west of Kelowna. At the **Tadpole Lake** (Dobbin II) prospect, results from a 2005 winter drill program were released that intersected molybdenum-bearing veins in granitic rocks with some significant intersections such as 10.7 metres of 0.095% molybdenum in hole 05-01 and 16.8 metres of 0.106% molybdenum in hole 05-10. Just to the southeast, the companies drilled the **Dobbin 1** copper-platinum-palladium property. The aim of this program was to drill northeast of the "Central Zone" and test the depths of the ultramafic complex which is thought to contain platinum group elements. Previous drilling in this area intercepted 111 metres of 0.19% copper, 0.410 g/t platinum and 0.352 g/t palladium.

Jasper Mining Corp drilled the **Isintok** molybdenum-copper-silver prospect, located southwest of Summerland, in two campaigns in 2006. The initial program of ten holes reportedly confirmed near surface, consistent low-grade porphyry mineralization that was previously drilled by Anaconda Canada Exploration Ltd and Canex Aerial Exploration Ltd. Long intervals such as 120.08 metres of 0.127% copper, 0.012% molybdenum and 1.414 g/t silver close to surface in hole ISIN-06-06, and 220.33 metres of 0.072% copper and 0.003% Mo in hole ISIN-06-03 have provided the company with encouragement. The company reports there are indications of additional deeper zones of mineralization that may not have been fully explored over the property's history.

At the **Barnes Creek** property, located near the Monashee Pass and 70 kilometres southeast of Vernon, Columbia Yukon Explorations Inc trenched and drilled several promising gold-arsenic anomalies on the Holmes Lake grid. Despite a history of placer gold mining, this area has had little bedrock exploration. The target is structurally controlled gold-silver vein or shear-hosted mineralization within subvolcanic intrusive rock. In 2005, trench 31N uncovered quartz veins within feldspar porphyry diorites and andesitic flows that assayed up to 16.6 g/t gold over 0.15 metre; however, the fractured wall rocks are also reported to carry anomalous gold values to widths of over 2 metres.

FRASER RIVER-MERRITT-ASHCROFT

Several large programs were aimed at low-sulphidation epithermal gold-silver targets in the maturing Spences Bridge gold belt, located between Merritt, Spences Bridge and Lytton. Preliminary estimates suggest that $4 to 4.5 million will be spent in this belt alone in 2006. Exploration in the region began in 2001 when prospector Ed Balon of Almaden Minerals Ltd began following up Regional Geochemical Survey anomalies.

On the large **Skoonka Creek** project, partners Strongbow Exploration Inc and Almaden Minerals Ltd continue to piece together a very encouraging regional play (Figure 5.15). The property is located southwest of Spences Bridge and accessed by roads from Lytton. Mineralization consists of delicately banded, low-sulphidation epithermal quartz veins surrounded by clay alteration zones. Strongbow Exploration Inc, as the operator, collected over 1500 rock and 4500 soil geochemical samples across the property and completed detailed bedrock mapping. The **JJ** prospect was drill tested by 12 holes in the spring which extended the mineralization to a length of 750 metres and down dip 140 metres from the surface. This work was designed to follow-up excellent drill results from 2005 including 20.2

Figure 5.15. A trench across the JJ Zone at the Skoonka property.

g/t gold over 12.8 metres on hole SC-008. Some of the best assays from recent campaign returned 5.79 g/t gold and 28.2 g/t silver over 1.73 metres in hole SC-012 and 7.25 g/t gold over 0.92 metre in hole SC-015. Structural re-interpretation and an IP survey led to a fall drill program of six holes. Visual examination of the core indicates the mineralized system exists down dip to at least 250 metres below the surface and assays are pending.

Approximately three kilometres northeast of the JJ prospect, the company was also very active in advancing prospects within the **Discovery-Backburn** trend. In January an airborne magnetic /electromagnetic survey was flown over this three kilometre long gold-in-soil anomaly. Four bedrock gold showings have been identified. At the **Deadwood** showing rock grab samples have returned up to 13.8 g/t gold. The **Discovery** showing was tested with three drillholes which intersected similar grades to the surface exposure with the best intersection of 0.36 g/t gold over 11.33 metres from hole SC-024.

The **Prospect Valley** property is located 30 kilometres west of Merritt and was the subject of a substantial program by Consolidated Spire Ventures Ltd. The bulk of work was centered on the **RM/RMX Zone** where 23 holes tested near-surface epithermal gold-silver mineralization. The company reports that the strongest mineralization appears to be associated with a northwest-dipping horizon of silicified amygdaloidal andesitic basalts overlying an interpreted thrust fault contact with unaltered andesites, basalts, and ash and lapilli tuffs. An intersection of 1.57 g/t gold over 45.7 metres was returned in hole RM2006-21, which included several high-grade intervals such as 9.541 g/t gold over 1.5 metres. A fall program of a detailed magnetometer survey identified two new zones of interest near the outer extents of the 1.5 kilometre-long strike length of the RM/RMX Zone. These will be pursued in an upcoming field program.

At the **NIC** vein zone of the Prospect Valley property, Consolidated Spire Ventures Ltd drilled five holes to explore outcrop showings of gold-bearing epithermal quartz veining.

A large number of regional grass roots exploration programs were undertaken within the Spences Bridge Gold Belt with several companies actively prospecting, rock, soil and silt sampling at levels unseen in recent times. The large tenure holdings of Almaden Minerals Ltd were largely optioned to other companies either active in the belt or trying to secure some prospective ground. A selection of active companies include: Strongbow Exploration Inc (**I.P, Southern Belle, Silk, Inn, and Shovelnose**), Tanqueray Resources Ltd (**Pima, Goldpan, Nicoamen, Otter, and McCaffrey**), Williams Creek Exploration Ltd (**Merit, Brookemere**), Anglo-Canadian Uranium Corp (**Skoonka-Boothanie, B4 B5 B6**) and Almaden Minerals Ltd (**Ponderosa**). On the latter, the **Axe Ridge** showing produced a series of bulk channel samples that were reported to have returned 2.43 g/t of gold over 10.5 metres.

Goldcliff Resource Corporation has reported a new discovery at the **Plug** project, located twelve kilometres east of Logan Lake. The company has actively explored in the Nicola Group for epithermal gold-silver mineralization along the Clapperton fault system for several years, primarily around the Plug and **Meadow** showings. The new showing has been called the **Logan** showing and is reportedly a pervasively carbonate altered and brecciated outcrop which is mineralized with pyrite, chalcopyrite and malachite. Grab samples have reported up to 0.23% copper and 70 ppb gold.

Avalon Ventures Ltd was active again on the **Red Hill** massive sulphide copper-zinc-silver property near Ashcroft. The company continued to test its new structural model as well as a time-domain electromagnetic (TEM) geophysical conductor detected in a down hole survey of hole 05-23. Four drillholes were completed and all intersected pyrrhotite-pyrite massive sulfide mineralization with minor chalcopyrite over intervals of up to twenty metres. Hole 06-25 intersected a chalcopyrite-dominated massive sulphide zone that produced 10.15% copper, 5.45% zinc, 1.41 g/t gold over 1.74 metres. The company reports the intersection in hole 06-25 appears to be fault-bounded and may represent a faulted slice from a larger massive sulfide body. Further down-hole geophysics were completed on hole 06-25 and a strong Pulse EM conductor has been reported in the

vicinity. The company is planning an airborne EM survey followed by further drilling.

Just outside of Merritt, Christopher James Gold Corp drilled a single deep hole on the **Betty** claims located three kilometres west of the past producing **Craigmont** copper mine. The hole was aimed at testing for Craigmont-style skarn mineralization at the contact between limestone rocks and the Guichon Creek batholith.

REVELSTOKE-SHUSWAP-NORTHERN MONASHEES

This area is best known for its stratiform base-metal deposits hosted in cover sequences of the Monashee Complex. The deposits in this area have many characteristics of "Broken Hill-type" deposits although some more closely resemble classic Besshi and sedex deposits. International Bethlehem Mining Corporation (formerly Orphan Boy Resources Inc) through a wholly owned subsidiary owns the **Goldstream** copper-zinc mine-mill complex north of Revelstoke. The company is currently evaluating the viability of processing the zinc and copper contained within the mill tailings pond. Metallurgical studies have recently been completed and results are pending. This custom mineral processing plant lies in the heart of this mineralized region with a 1350 dry metric tons per day capacity to process off-site mineral deposits as well.

Selkirk Metals Corp undertook a very aggressive program at the **Ruddock Creek** property located within the Script Ranges about 100 kilometres north of Revelstoke (Figure 5.16). The program was focused on the southern edge of an interpreted basin which is defined by 12 known stratiform massive sulphide zinc-lead deposits and prospects that occur over 5.5 kilometres. The relationship between the showings continues to include an element of discovery due to structural complexity and a general absence of marker horizons. The best known deposit in the area is the **E-Zone** which was the principal focus of the 2006 program and 25 holes were drilled to test its continuity. Previous work by Falconbridge Ltd and Cominco Ltd had defined an inferred mineral resource of 1.5 million tonnes grading 8.4% zinc and 1.6% lead. The company reports that it has confirmed the continuity of the zone from its surface expression to a distance of 1.2 kilometres to the west. As well, drilling on the western extents seems to confirm a thickened portion of the zone with hole RD-06-152 intersecting 11.7% zinc and 2.27% lead over 22.6 metres. This hole pierced the E-Zone 25 metres up dip from hole RD-05-113 which intersected 19.12 metres grading 15.79% zinc and 3.33% lead. Approximately 900 metres southwest of the western extents of the E-Zone, the company completed ten holes at the newly discovered **Creek Zone**, postulated to be an offset of the E-Zone. A

Figure 5.16. The core logging facility overlooking Light Lake at the Ruddock Creek property.

two-metre composite channel sample from outcrop averaged 22.5% zinc and 6.2% lead. The best hole from this program intersected 11.21% zinc and 2.65% lead over 6.23 metres in hole RD-06-144.

Buoyed by a successful program this year Selkirk Metals Corp has initiated planning for the development of a decline to facilitate underground delineation drilling and bulk sampling of the E-Zone.

Contiguous to the Ruddock Creek property, Jasper Mining Corporation flew a 564 line-kilometre airborne electromagnetic and magnetic survey and drilled four holes at the **Irony** property. The company believes that the massive sulfide horizon known at the Ruddock Creek property has western extensions onto ground they hold. The holes drilled did not intersect the horizon; however, the targets were chosen using information previous to the airborne survey results which were not delivered in time for the program.

Located approximately 15 kilometres west of Ruddock Creek and northeast of Avola, Inlet Resources Ltd undertook a small trenching program at the **Broken Hill–Leo** property. Numerous zinc-lead-silver showings are reported in carbonate stratigraphy over a strike length of nine kilometres.

Consolidated Venturex Holdings Ltd optioned Selkirk Metals Holdings Corp's **LJ** property, located 35 kilometres north of Revelstoke. The company completed

ten holes in the **Carnes Creek zone** as a follow up to 2005 drilling which intersected zinc-lead-silver mineralization in a similar stratigraphic horizon as the Goldstream deposit to the north. Preliminary results suggest the mineralization is hosted within the limbs and hinge-zone of a reclined synform and is more akin to sedex-style mineralization. Some select intersections include 3.22% zinc and 1.52% lead over 6.85 metres in hole LJ06-03 and 3.35% zinc and 2.34% lead over 6.11 metres in hole LJ06-06. Further work is planned to test the hinge-zone along its strike to the southeast.

International Bethlehem Mining Corp was active on its **Rain** property which it includes in its "Big Bend Metals Project" a collection of properties it holds in the area of the Goldstream mine. A 700-kilometre airborne survey was completed over the property as well as a regional silt sampling program. The **Sorcerer** tungsten-copper skarn was tested with four holes and produced an unexpected intersection that averaged 0.372% molybdenum over 5 metres in hole RN06-27.

ASPEN GROVE-PRINCETON-KEREMEOS

This part of the region was increasingly active during 2006 with exploration interest being mainly focused on porphyry copper-gold-molybdenum prospects. The **Similco** (Copper Mountain-Ingerbelle) copper-gold mine at Princeton remains on care and maintenance. When it shut down in 1996, the Similco mine was reported to have a resource of 142 million tonnes grading 0.397% copper (plus unreported gold) in the area of Pits 2 and 3 on the Copper Mountain side of the property. The property was sold in 2002 to Envirogreen Technologies Ltd, a company involved in the remediation of special wastes. An option agreement regarding the mineral rights, some of the mine infrastructure and private land holdings has recently been signed with a new private company called Copper Mountain Mining Corporation who plan to drill in early 2007.

A few kilometres east of the historic Nickel Plate gold mine at Hedley, the **Panorama Ridge** gold skarn project of Goldcliff Resources Corp was active again in 2006. The property has numerous showings with wide zones of near-surface low-grade gold mineralization. Most work was focused on the Nordic and York-Viking zones but the company also completed trenching and drilling at the Spar, Tower and Thor zones. Early trench results from the York-Viking zone include 1.138 g/t gold over 27.5 metres in trench YK-98 with high-grade intervals such as 3.417 g/t over 3 metres.

During 2006, the Upper Similkameen Indian Band signed separate Memorandum of Understanding Agreements regarding consultation and information sharing with both Goldcliff Resources Corp and the Ministry of Energy, Mines and Petroleum Resources. These progressive agreements provide certainty to all parties that their interests will be recognized as projects are advanced.

Copper Belt Resources Ltd conducted a late season drill program on the **Ketchan** porphyry copper-gold prospect near Aspen Grove. Drilling in 2005 produced some promising results including 0.42% copper and 0.12 g/t gold over 54.9 metres and 0.46% copper and 0.36 g/t gold over 19.2 metres in hole K05-8.

Approximately 12 kilometres south of Princeton and five kilometres south of the Ingerbelle Mine, Anglo-Canadian Uranium Corp drilled the **Princeton Copper** project to test the contact of the Copper Mountain intrusions with Nicola Group volcanic and sedimentary rocks for copper-gold-palladium mineralization.

Weststar Resources Corp and partner Bearclaw Capital Corp drilled the **Axe** porphyry copper-gold prospect located 20 kilometres north of Princeton. Large programs by previous operators in the 1970s and early 1980s have tested four zones of mineralization with some 14 000 metres of drilling. Historic resources total 39.0 million tonnes grading 0.38% copper (indicated) plus 32 million tonnes of 0.38% copper (inferred).

Southwest of the village of Tulameen, along the Tulameen River, Huldra Silver Inc undertook baseline studies at various sites aimed at developing a tailings pond at the **Treasure Mountain** vein silver-lead-zinc project. The company is working toward submitting an application for a underground mine permit in the spring of 2007. The proposed plan would mine 33 000 tonnes over an eight month period each year. Historical resources at the property are reported to be 133 000 tonnes grading 870 g/t silver, 4.5% lead and 5.3% zinc.

OUTLOOK FOR 2007

With many companies unable to complete their programs in 2006 as a result of shortages of drills, field crews and a quick onset of winter this should bode well for the continuation of many programs into 2007. The varied geology of the South-Central Region hosts many favorable environments for exploration including porphyry, high-grade vein and stratiform deposits. With continued high metal prices the outlook is very promising for any of these deposit types.

A busy year is expected in 2007 with the New Afton project moving through the permitting process and proceeding through to construction planning and early development of the site. Environmental assessments and feasibility studies are anticipated to be completed on the Prosperity project and Highland Valley Copper mine expansion. Scoping and pre-feasibility supporting work is anticipated at the Bralorne, Blackdome and Goldstream mines and at the Ruddock Creek, Elk, Ajax, Getty Copper, and Blue River Carbonatite projects.

ACKNOWLEDGMENTS

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SOUTHWEST REGION

By Bruce Northcote, PGeo
Regional Geologist, Vancouver

SUMMARY AND TRENDS

The region's minerals related production was significant and varied during 2005, including metals, coal, industrial minerals and aggregate. The two largest revenue producers are the **Myra Falls** metal mine and the **Quinsam** coal mine. Both these operations conducted exploration during 2006, and Myra Falls made mill improvements which resulted in improved recoveries and lower smelter penalties.

The industrial minerals and aggregate operations, taken together, generate revenue on an order of similar magnitude as the two big mines. Lower mainland cement plants of Lehigh Northwest Cement and Lafarge North America, as well as the Ash Grove plant in Seattle, represent important local markets for quarried materials, while the construction industry along North America's western seaboard requires large quantities of aggregate.

Myra Falls celebrated 40 years of operation in 2006. During its lifetime the mine has been a major contributor to the Campbell River region's economy, and it currently employs approximately 400 people. Present reserves could last another five years; however, ongoing exploration is designed to extend the mine life.

One of the more interesting mine development projects in the province, the **Orca** sand and gravel quarry on northern Vancouver island near Port McNeill, is making good progress as construction is on schedule and within budget. They expect to begin stockpiling inventory in December 2006 and make their first shipment within the first quarter of 2007. The company is constructing a shiploading facility on Broughton Strait capable of accommodating Panamax class freighters and it is targeting the California market. The operation is designed to be capable of producing and shipping six million tonnes per year for a projected lifespan of 25 years.

Total, regional exploration expenditures focusing on metals, coal and industrial minerals are expected to be close to 2005 levels (Figure 6.1). Both 2005 and 2006 spending were up dramatically from the preceding six years. Several projects remained active throughout December.

Two exploration projects are estimated to have spent in excess of $1 million in 2006 and a total of nine were in excess of $250 000. In 2005, three projects had budgets over $1 million and nine had more than $250 000.

An estimated 43 000 metres of exploration drilling was carried out in the Southwest Region in 2006, a decline from the previous year (Figure 6.2).

The Southwest Region has a long history of exploration and mining and it encompasses a wide variety of exploration targets. Despite its long history, many parts of the region remain underexplored reflecting a variety of factors, including rugged terrain, poor access and poorly known geology.

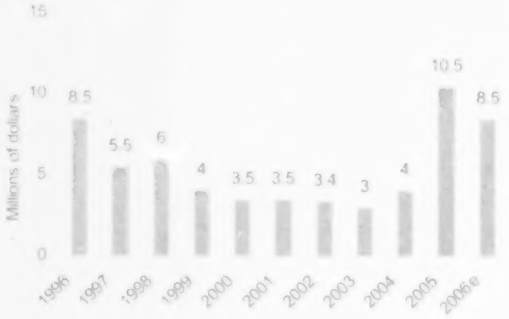

Figure 6.1. Annual exploration spending, in millions of dollars, Southwest Region.

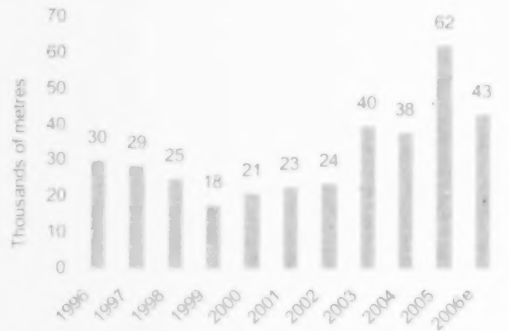

Figure 6.2. Annual exploration and development drilling, in thousands of metres, Southwest Region.

MINES AND QUARRIES

Current major producing mine and quarry locations in the Southwest Region are shown on Figure 6.3 and basic data concerning these sites are listed in Table 6.1.

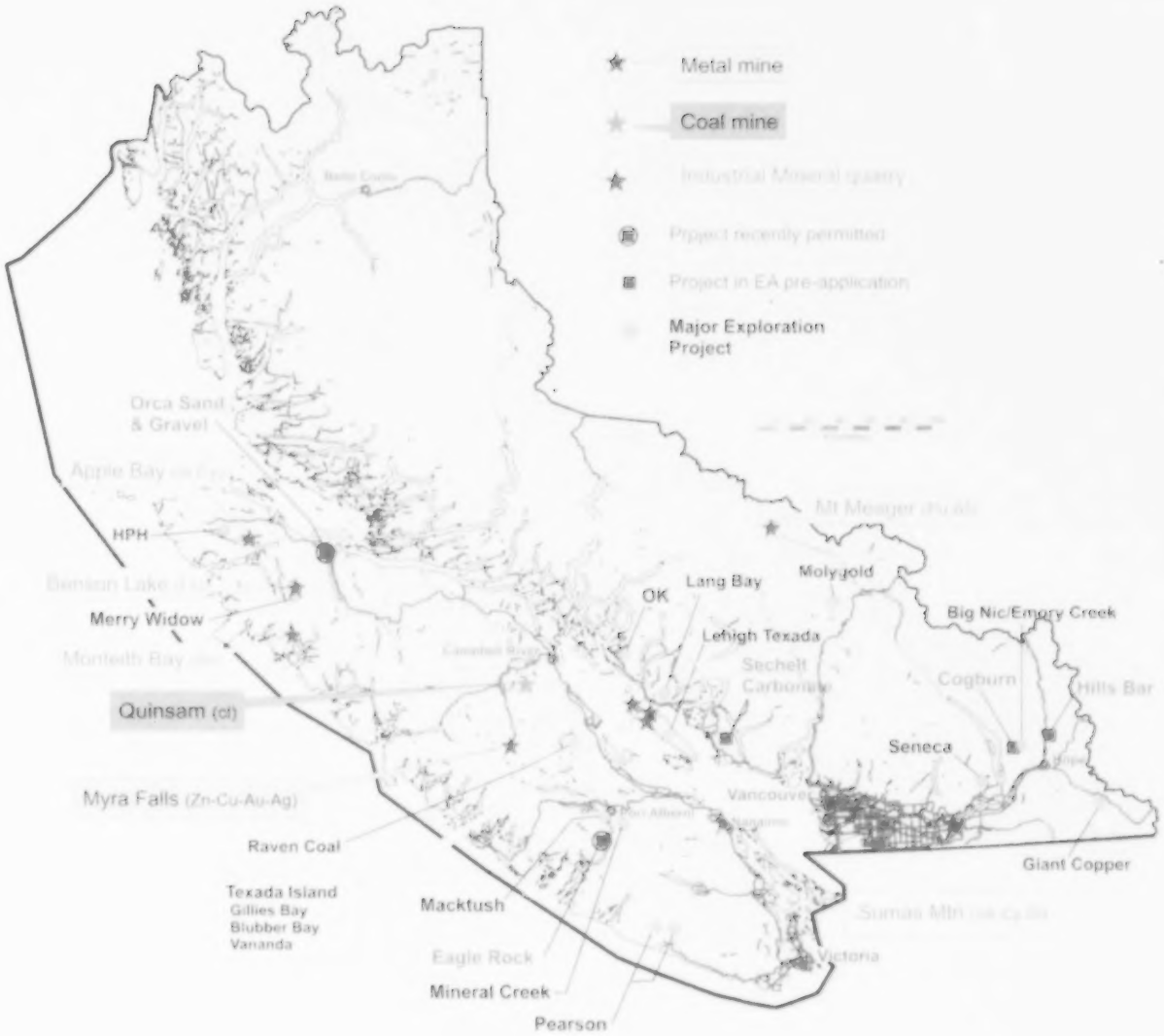

Figure 6.3. Mines, quarries and major exploration projects in Southwest British Columbia, 2006.

The first mill at the **Myra Falls** camp opened in 1966, making 2006 the fortieth year of operations. During those years approximately 26 million tonnes of ore have been mined from several volcanogenic massive sulphide deposits. Breakwater Resources Ltd assumed control of the operation in mid 2004; the mine is operated for Breakwater by its subsidiary, NVI Mining Ltd. Myra Falls currently operates two underground mines: the H-W mine and the Battle-Gap mine.

The **Myra Falls** mine, located in Strathcona Provincial Park just over 50 km southwest of Campbell River, milled 548 255 tonnes of ore in the first nine months of 2006, as compared to 685 694 for the same period in 2005. The 2006 production estimates as of September 25th were 750 000 tonnes of 5.9% zinc, 1.1% copper, 1.4 g/t gold and 42.9 g/t silver. Ventilation requirements are reported to have been the principal factor in holding back production improvements. A severe storm in mid November damaged a bridge on the road to the mine, necessitating a brief suspension of operations.

Mill upgrades during 2006 resulted in better zinc and copper recovery, lower zinc and lead penalties for copper concentrate, and production of a new lead concentrate. As well, a new gold circuit is improving recovery.

Proven and probable reserves as of December 31, 2005, were 6000 Mt at 6.4% Zn, 1.1% Cu, 1.3 g/t Au and 46 g/t Ag. Measured and indicated resources including the reserves are estimated at 8.6 Mt grading 7.8% Zn, 1.4% Cu, 64 g/t Ag and 1.8 g/t Au. Based on these figures, the mine could sustain production into 2011. However, exploration is in progress with the goal of significantly augmenting reserves. The company reassembled the Myra Falls exploration department early in 2006. The 2006-2007 program will include district scale exploration

TABLE 6.1. PRODUCING MINES AND QUARRIES, SOUTHWEST REGION, 2006

Mine / Quarry Operator	Location / community	Commodities	Forecast production in 2006	Employment person years	Reserves as of January 1, 2005
Myra Falls NVI Mining Ltd (Breakwater Resources Ltd)	Campbell River	Zn-Cu-Au-Ag	750 000 t of 5.9% Zn, 1.1% Cu, 1.4 g/t Au, 42.9 g/t Ag	~400	6000 Mt at 6.4% Zn, 1.1% Cu, 1.43g/t Au, 46 g/t Ag
Quinsam Quinsam Coal Corp (Hillsborough Resources Ltd)	Campbell River	Thermal & PCI coal	520 000 t clean coal	91	25.7 million tonnes (reserves and resources)
Apple Bay Electra Gold Ltd	Northern Van Island	Geyserite	120 000 t	6	5 million t
Benson Lake Imasco Minerals Inc	Northwest Van Island	Limestone	36 000 t	3	100+ years
Blubber Bay Ash Grove Cement Corp	Texada Island	Limestone aggregate, dolomitic lst	~600 000 t	14	
Gillies Bay Texada Quarrying Ltd (Lafarge Canada Inc)	Texada Island	Limestone, lst aggregate	5.6 million t	90	100+ years
Vananda Imperial Limestone Company Ltd	Texada Island	Limestone	255 000 t	8	50 years
Monteith Bay Lehigh Northwest Cement Ltd	Northwest Van Island	Geyserite	30 481 t	6	
Mount Meager Great Pacific Pumice Ltd	Pemberton	Pumice	20 000 cubic metres	3	100+ years
Sumas Mtn Clayburn Industries Ltd and cement manufacturer partners	Abbotsford	Clay, shale and sandstone	~ 500 000 t	10-20	~70 years

Note: Blubber Bay and Gillies Bay produce limestone for both industrial mineral applications and aggregates - other large aggregate only operations are not included in this table.

as well as expanding known ore bodies by completing 25 000 m of diamond drilling and 600 m of underground drifting to gain access to the Marshall East target.

Through compilation and review of historical and recent data, targets have emerged along the Marshall-Trumpeter trend, north of the highly productive Battle-Gap HW trend and in the Marmot to the south.

The **Quinsam** coal mine, owned and operated by Hillsborough Resources Limited is located approximately 20 km southwest of Campbell River. It produces thermal coal, used mainly for cement manufacture. The mine commenced with surface operations in 1987, then moved operations underground in the 1990s. The operation uses mechanized, remote-controlled continuous miners in a retreat room and pillar method.

In 2006 the Quinsam mine produced approximately 3000 tpd of raw coal, resulting in annual production of 765 000 raw tonnes or 520 000 clean tonnes. Production has more than doubled since 2003 and a further increase in production is planned for 2007. The wash plant has a 250 tonne/hour capacity. As of December 31, 2005, the Quinsam mine had reserves and resources of 25.7 million tonnes. In 2005, Hillsborough embarked on a long term exploration project designed to significantly increase resources and reserves. The work extended into 2006. Drilling at the **Quinsam North** property led to 25 293 000 tonnes of measured and indicated coal resources and an inferred resource of 11 688 000 tonnes. When developed, this resource, located adjacent to the existing mine, could extend mine life significantly beyond the current 9 years (Figure 6.4).

QUARRIES

The **Gillies Bay** limestone and aggregate quarry of Texada Quarrying Ltd is expected to quarry more than 5.6 million tonnes in 2006 and ship well over 5 million. The bulk of its product feeds cement plants, such as the Lafarge and Lehigh plants in Richmond and Delta. However, a recently upgraded aggregate plant is capable of producing up to 1.5 million tonnes of limestone, volcanic rock and granite crushed aggregate. Former waste dumps, including those from past producing magnetite mines on the property, can be re-considered for use as aggregate stockpiles.

Among the quarry's assets is deep water ship-and-barge loading facility with a 4000 tonne/hour single quadrant ship-loader capable of loading a Panamax freighter in less than 24 hours. This facility has proved useful to other mines in the region such as Quinsam Coal, for re-loading material from barges into larger vessels for international transport. In 2006, Texada Quarrying acquired two Caterpillar 777 haul trucks and a Caterpillar 385 excavator, which will facilitate the selective separation of limestone for cement and dike material for aggregate purposes.

More than half of the Gillies Bay product shipped goes to Lower Mainland markets and roughly 40% to US markets in Washington, California and Hawaii.

Ash Grove Cement's **Blubber Bay** quarry is expected to ship approximately 600 000 tonnes in 2006. Limestone has been quarried at Blubber Bay continuously since 1907. Currently most is sold as aggregate; however, the quarry also produces a higher magnesium (16.75% MgO or more) dolomitic product for agricultural use.

Figure 6.4. Block faulting in the Comox Formation at Quinsam Mine.

Approximately 45 000 tonnes of this recently-developed dolomitic limestone product will be produced in 2006.

Imperial Limestone's Quarry at **Van Anda** will produce approximately 255 000 tonnes of limestone in 2006, mainly for use in the US construction market.

Clayburn Industries Ltd produces 500 000 tonnes of clay, shale conglomerate and sandstone annually from their **Sumas Mountain** quarry and most of the production feeds local cement plants. Approximately 35 000 tonnes per year of the highest grade clay, is used in the manufacture of facebrick and refractory products, such as firebrick and castables, which are marketed through Clayburn Refractories Ltd.

The **Apple Bay** geyserite quarry of Electra Gold will produce approximately 120 000 tonnes in 2006 for use at the Ash Grove cement plant in Seattle. A bulk sample is planned for the near future, which may result in a new customer and an increase in production.

Monteith Bay quarry, operated by a subsidiary of Lehigh Northwest Cement Limited, produced 30 481 tonnes of geyserite in 2006 to supply its cement plant in Delta. Geyserite is an opaline, hydrous silicon-dioxide commonly formed around hot springs and geysers. It finds application as a silica-rich additive in cement manufacture, among other uses.

Imasco Minerals Inc operates a limestone quarry at **Benson Lake**, producing a high brightness product with a variety of uses as an extender and filler for paper, plastics, rubber, adhesives, glazes and paints. Production is estimated at 36 000 tonnes in 2006.

Great Pacific Pumice Ltd expects to produce as much as 20 000 tonnes of pumice at its **Pum** deposit at **Mount Meager**. Pumice has construction applications including lightweight fill and concrete, agricultural applications and several potential industrial uses.

Sumas Clay Products Ltd operates a small clay quarry at Kilgard, and produces bricks at a plant first constructed in 1912. The company produces a line of products for regular clientele and also fills custom orders for brick and clay products (Figure 6.5).

Medical and cosmetic grade clays are quarried at the **DeCosmos** clay property on Hunter Island south of Bella Bella and the **Carrie Cove** quarry near Comox. The products are marketed by the Ironwood Clay Company Inc and Carrie Cove Cosmetics Inc, respectively. Production occurs on a small scale and is not necessary every year.

AGGREGATES

The aggregates industry is a significant contributor to the economy in the southwest. Demand remained strong throughout 2006 and quarries in the Southwest Region are estimated to have produced approximately 35 million tonnes of aggregate, worth over $200 million. Aggregate materials have a low unit value, and much of the ultimate value depends on its location either near a large market, such as BC's Lower Mainland, or near a ship or barge loading facility to service markets on North America's western seaboard. Several of Canada's top aggregate producers are located in southwestern British Columbia.

The **Sechelt** sand and gravel pit, of Construction Aggregates Ltd, is expected to produce approximately 4.8 million tonnes during 2006. According to *Aggregates and Roadbuilding Magazine* it was Canada's largest sand and gravel producer in 2005 by a wide margin. It was the second largest aggregate producer overall only to **Gillies Bay**, which produces crushed rock both for aggregate and cement manufacture. Several other operations in the Southwest Region produce in excess of a million tonnes of aggregate annually, whether sand, sand and gravel, crushed rock or a combination of these.

Producer's Pit in Metchosin, also a Construction Aggregates Ltd operation, has historically been a greater than 1 million tonne producer. It is expected to be depleted about the end of 2007 and Sechelt production is expected to increase to offset the difference.

Cox Station Quarry is operated by Mainland Sand and Gravel and is located on the Fraser River at Sumas Mountain. Recently, it has produced approximately 2 million tonnes per year of a crushed granite product, most of which is shipped by barge on the Fraser River. Three other large producers of crushed aggregate are found on Sumas Mountain: Highland quarry, Summit quarry (Lafarge Canada) and Western Rock quarry.

Four large sand, gravel and crushed aggregate producers are located in the **Bradner Road** area west of Abbotsford, and a number of large pits are located on the Fraser River's North Shore at Mission, Maple Ridge and Coquitlam. Three of the largest operations are located on **Pipeline Road** in Coquitlam.

Lafarge's **Earle Creek Pit** is another large (more than 1 million tonnes per year) sand and gravel pit located on the Sunshine Coast at Earl Creek on Skookumchuck narrows. The plant has a nominal production rate of 500

Figure 6.5. Sumas Clay Products (Photo by J. Pardy).

tonnes/hour. Similar to many of the other very large quarry and pit operations, it employs a conveyor barge loading system for efficient transport to coastal markets.

A portion of material shipped from Texada Island quarries consists of aggregate products. In total they produce 1-2 million tonnes annually, with the capacity to produce more.

There are numerous smaller sand and gravel pits throughout the Lower Mainland and Vancouver Island on both public and private lands, probably numbering over one thousand. Many of these are active only sporadically.

DIMENSION STONE/LANDSCAPING STONE

Quarrying of stone for construction and landscaping purposes is increasing in importance and takes place at a number of locations around Vancouver Island and the Lower Mainland.

Two quarries located along the Strait of Georgia have provided stone for historic landmark buildings in British Columbia. Both increased their production in 2006. Hardy Island Granite Quarries Ltd expects to produce approximately 6000 tonnes of granodiorite from its quarry on **Hardy Island** at the mouth of Jervis Inlet in 2006. Haddington Island Stone Works will produce approximately 1000 tonnes of rock from **Haddington Island** in Broughton Strait near Port McNeil. Hardy Island was reopened in 1999 and Haddington in 2004 (Figure 6.6).

Matrix Marble and Stone, located in Duncan, BC, mines three colours of marble at its quarries on Vancouver Island. The company produces value-added items such as countertops and bathroom fixtures.

Margranite Industry Ltd of Surrey, BC uses a small amount of local stone for its polished granite tiles and slabs. Robson Rose, Alpine Summer and Cascade are among the colours quarried locally. Most of Margranite's product is made from a variety of exotic imported stone.

Huckleberry Stone Supply Ltd quarries local basalt in the Whistler-Squamish area for construction and landscaping purposes from a number of small quarries: **Spumoni, Cabin, Freeman, Rubble** and **Huckleberry**. Production for 2006 is estimated at roughly 15 000 tonnes. Phyllite is also quarried in the Whistler area.

Several operators quarry slate in the Port Renfrew area on a small scale, including Van Isle Slate, K2 Stone Quarries and Island Stone and Landscape Supply Ltd. Uses are primarily landscaping and residential construction.

MINE DEVELOPMENT PROJECTS

Exploration and development of several significant aggregate and sand and gravel deposits is ongoing. In particular, **Orca Bay** sand and gravel, near Port McNeil on northern Vancouver Island is scheduled to begin production by the end of 2006. The operator, Polaris Minerals Corporation, projects first year sales of 1.4 million tonnes. It hopes to eventually ramp up production to over 6 million tonnes (7 million short tons) per year.

Polaris reports the **Orca** sand and gravel operation is on-schedule with construction and is within budget. They expect to begin stockpiling inventory in December 2006 and make their first shipment within the first quarter of 2007. The focus is on the California market. British Columbia's Lower Mainland and Hawaii are also mentioned as target markets. The operation is designed to be capable of producing and shipping six million tonnes per year and have a life of 25 years. Potential exists to increase reserves.

Key to the economic viability of the project will be their deep water ship loading facility capable of loading 70 000 tonne CSL International Panamax freighters. Other coastal BC quarries at Gillies Bay and Sechelt have demonstrated that similar logistics can be feasible.

The **Eagle Rock Quarry** project of Polaris Minerals Corp, located 15 km south of Port Alberni received its provincial environmental assessment certificate and mine permit for production of 6 million tonnes per year in 2003. The project has a large resource (686.9 million tonnes) of granite for construction aggregate. However a feasibility study is on-hold as the company focuses on its **Orca** sand and gravel project.

Pan Pacific Aggregates Ltd began the pre-application phase of environmental assessment with their **Sechelt Carbonate Project** late in 2005. The company is considering development of a 4-6 million tonne-per-year carbonate quarry with a 25-year lifespan on the Sechelt Peninsula.

The **Hills Bar Aggregate** project of Qualark Resources Inc entered the pre-application phase of environmental assessment in 2003 with a project description. No evidence of progress has been published since that time.

The **Cogburn** magnesium project remains in the pre-application phase of environmental assessment. Leader

Figure 6.6. The lions on the steps of the Vancouver Art Gallery were carved from Hardy Island Granite.

Mining announced the acquisition of additional land and an airborne geophysical survey of 234 line km over its Emory zone claims.

Benson Lake Magnetics Ltd is testing tailings and waste dumps at the **Coast Copper** and **Iron Crown** mines. The company anticipates operating a small magnetite processing plant at Benson Lake on Northern Vancouver Island. The product would be used for washing coal.

EXPLORATION HIGHLIGHTS

Major 2006 mineral exploration projects in the Southwest Region are listed in Table 6.2 and their locations are shown on Figure 6.3.

North Island

Lumina Resources' **Hushamu** (MINFILE 092L 240) project had little activity during 2006, but the 2005 discovery of porphyry style mineralization at the NW Expo prospect (95 metres of 0.17% Cu and 1.0 g/t Au), together with the presence of other known porphyry style targets within the Island Copper area suggest further work in 2007. Late in 2006, Western Copper Corporation succeeded in their effort to purchase all outstanding shares of Lumina.

The **Merry Widow** (MINFILE 092L 044, 045, 046) property of Grande Portage Resources Ltd had a successful drilling campaign during 2006, with a number of promising gold intersections and an expanded land position. A grid drilling program along the Old Sport Horizon is planned for 2007 in addition to testing more of the 3.5 km Merry Widow trend.

The Merry Widow property has two skarn deposits that were mined at three locations. The Merry Widow mine produced magnetite primarily from an open pit operation. Approximately 3.4 million tonnes of ore were mined and about 1.7 million tonnes of iron concentrate shipped. The Old Sport skarn horizon is located along a conformable contact between the Karmutsen volcanics and Quatsino limestone of the Vancouver Group and was mined at two locations. The Coast Copper and Benson Lake mines produced copper, magnetite, iron, gold, silver and cobalt from magnetite skarn, chalcopyrite and bornite veinlets, lenses and disseminations. Roughly 2.6 million tonnes of ore were mined, yielding approximately 91 million pounds of copper, more than 500 000 tonnes of iron, 377 000 ounces of silver and 124 000 ounces of gold.

The targets of current exploration are precious metal enriched skarn deposits. Historically reported gold grades were in the 1 to 2 g/t range, but intervals grading much higher were reported in the current program. For example, 6.51 g/t gold, 21.93 g/t silver and 1.38% copper over a 50.32-metre interval starting at 20 m in diamond drill hole DDHMW-17.

Step out drilling at the Merry Widow pit is underway at the time of writing, with holes on the Raven zone. Weather permitting the Marten zone is next on the schedule.

New Livingstone Minerals Inc took a 900 tonne bulk sample from the **HPH** property (MINFILE 092L 069), located between Holberg and Port Hardy on northern Vancouver Island. The HPH prospect has been described as having zinc-rich skarn manto mineralization, silicified limestone, sphalerite veins and magnetite-pyrite contact deposits.

Doublestar Resources undertook a significant mapping and rock geochemistry program on their **Century Limestone** project northwest of Gold River. Lehigh Northwest Materials Ltd conducted a seismic survey and drilled number of test holes and pits on an aggregate deposit at **Sayward**. Merit Mining Corp dug trenches on the **Virosa**, approximately 28 km south of Sayward.

Campbell River/Comox

In 2006 Compliance Energy Corp announced a $2.1 million dollar exploration program on its **Raven** (MINFILE 092F 333) project, consisting of a seismic survey and drilling. The Raven has a 2001 resource estimate of 38.5 million tonnes of metallurgical grade coal. A new resource estimate will be prepared on the basis of the 2006 work. Historically, the property produced 2 million tons of coking coal between 1949 and 1966. The focus of the 2005 exploration activity was the **Bear** (MINFILE 092F 313) project. It resulted in a non NI43-101 compliant resource update; further infill drilling is required to upgrade the Bear resource. The two deposits are approximately 12 km apart, and additional showings have been identified between them.

Port Alberni

Bitterroot Resources continued its **Mineral Creek** (MINFILE 092F 079, 331) project (approximately 10 km southeast of Port Alberni). It included a substantial drill program of 44 holes in the Lower Linda vein area and 22 to test the 900 zone, Gap fault and Mineral Creek fault. In total, approximately 2000 m were drilled during late 2005 and approximately 9000 m as of late November 2006. There were a number of significant gold intersections. At the time of writing, a drill rig is in place on the Big Southeaster property (approx 2 km south of Mineral Creek) for a planned 200 m, two-hole program designed to test a structurally controlled drill target. Bitterroot and Mineral Creek Ventures Inc plan bulk sampling on the Lower Linda and the 900 zone in early 2007.

TABLE 6.2. MAJOR EXPLORATION PROJECTS, SOUTHWEST REGION, 2006

Property	Operator	MINFILE (NTS)	Commodity	Target Type	Work Program
Big Nic / Emory Creek	Pacific Coast Nickel Corp	92HSW082,93	Ni-Cu-PGE	Magmatic	G,MG (2.4 km), AB (74.4 km)
Giant Copper	Imperial Metals Corporation	92HSW001,2, 27,161	Cu±Mo±Au	Porphyry	DD (1212 m)
HPH	New Livingstone Minerals Inc.	092L 069	Ag, Zn, Pb, Cu, Au, Mag	Skarn, Manto	TR, BU (900 t)
Lang Bay	Electra Gold Ltd	092F 137	Kaolinite, clay	Industrial Min.	DD (457 m)
Lehigh Texada	Lehigh Northwest Materials Ltd	092F 104	limestone	Industrial Min.	A, DD (2000 m)
Macktush	SYMC Resources Ltd	92F 012	Au-Ag-Cu±Mo	Vein, Porphyry	A, G, GC, DD (860 m)
Merry Widow	Grande Portage Resources Ltd	092L 044	Au-Ag-Cu± Co	Skarn	DD (~4500 m, in progress), AB, IP (8.85 km)
Mineral Creek	Bitterroot Resources Ltd	092F 079, 331	Au-Ag	Vein	DD (9000 m)
Molygold	TTM Resources Inc	092JW007,01 7,018	Cu-Mo	Porphyry	IP, GC, DD (2000 m)
Myra Falls mine	Breakwater Resources Ltd	92F 330, 071, 072, 073	Cu-Zn-Au-Ag-Pb	VMS	DD (~5000 m, in progress),
OK Copper-Moly	Goldrush Resources Ltd	92K 008, 057, 155	Cu-Mo	Porphyry	A, GC
Quinsam Coal mine	Quinsam Coal Corp (Hillsborough Resources Ltd)	092F 319	Thermal coal	Sedimentary	RD(800 m)
Raven Coal	Compliance Energy Corp.	092F 333	Metallurgical coal	Sedimentary	GP (21 km seismic), RD+DD (2850 m), BU (12 t)
Pearson (Reko, Bugaboo)	Emerald Fields Resource Corp	092C 022	PGE, Ni, Cu	Mag., skarn	G, AB-MG (1970 km)
Sechelt Carbonate	Pan Pacific Aggregates Ltd	092GNW031	Dolomite and other	Industrial Min.	AB-EM (740 km), G, GC, DD (9000 m)
Seneca	Carat Exploration Inc	092HSW013	Zn-Cu-Pb-Ag-Au	VMS	G, GC, AB(1080 km) DD (~3000 m, in progress)

Work Program Abbreviations:

A = access, trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CO = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; OP-BU = open-pit bulk sample; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching; UG (X m) = X metres of underground development; UG-BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)

SYMC Resources Ltd continued work on its **Macktush** (MINFILE 092F 012) property with mapping, prospecting and sampling and a drill program to follow up a 2005 airborne geophysical survey. Short holes tested the Fred vein system and drilling in the MC zone began. The company had drilled a total of 860 m in 2006 when the operation was suspended during a severe mid-November storm.

Drilling below trenching on the Fred veins has so far generally not returned results as encouraging as those obtained from chip samples at the surface. Other areas within this large property warranted further exploration with surface samples yielding multiple grams per tonne gold and more than one percent copper. For example, a representative chip sample graded 2.2% Cu, 1.19 g/t Au, 39 g/t Ag over 1.0 m at surface. Complete results of the 2006 drilling have not been released at the time of writing.

Port Renfrew

The **Pearson** (MINFILE 092C 022, 090, 091, 110, 146) project, operated by Emerald Fields Resources, was active again in 2006 with an airborne magnetic survey of 1970 line km and the acquisition of additional ground. The project is located approximately 14 km northeast of Port Renfrew.

The known mineral occurrences in the area are described as magnetite skarns; however, Emerald Fields has discovered some sulphide mineralization which has different characteristics. Commodities of current interest include copper, nickel and platinum group elements. The area has been mapped as underlain primarily by diorite of the Westcoast Crystalline Complex, but ultramafic rocks are also known in the area.

Also in the Port Renfrew area, Van Isle Slate has taken a bulk sample of about 150 tonnes slate from its **ATI** (MINFILE 092C 059) property for test marketing purposes. K2 Stone Quarries also markets products for landscaping and building which are quarried from rocks of the Leech River Complex.

Texada Island/Sunshine Coast

Activity continued on the **Sechelt Carbonate** (MINFILE 092GNW031) project of Pan Pacific Aggregates Plc, located approximately 15 km north of Sechelt. The company completed approximately 740 line km of airborne DIGHEM early in the year, followed by detailed geological mapping. By the end of the year the company plans to have drilled approximately 9000 m of NQ core. A new resource estimate is planned.

Exploration was substantially completed on Pan Pacific's **Southern Operation** (**Mineral Hill**, MINFILE 092GNW052, 053) area of the property in 2005. A permit to mine at that location has been in place since 1985. A biophysical baseline study is being conducted in aid of the company's plan to apply for a Large Producer permit. Pan Pacific acquired waterfront land to be considered for use as a ship loading facility.

On Texada Island, Lehigh Northwest Cement Ltd carried out a drill program on its **Lehigh South** (MINFILE 092F 104) limestone property in late 2006.

Eastfield Resources Ltd holds an option to earn a 100% interest in the **OK** (MINFILE 092K 008, 057, 155) porphyry copper project, which is located approximately 40 km north of Powell River. Prophecy Resources may earn up to 60% interest from Eastfield Resources by property payments and exploration expenditures. They conducted a surface program in May-June of 2006 consisting of road and drill pad construction, bedrock and soil sampling. Incorporating results of 2005 drilling, the new NI 43-101 compliant, inferred resource estimate is 86.8 million tonnes with average grades of 0.31% copper and 0.014% MoS_2 at a copper cut-off grade of 0.2%. The previous estimate (2005) was an inferred resource of 64.02 million tonnes with average grades of 0.34% copper and 0.016% MoS_2 at a 0.20% copper cut-off grade.

Electra Gold Ltd conducted a drilling program at the **Lang Bay Kaolin Project** (MINFILE 092F 137), following receipt of a mineral process engineering report. Markets for kaolin would include ceramics, paint, filler, fibreglass and cement feedstock products, depending on the specifications of the clay.

Pemberton

TTM resources continued exploration on its **Molygold** project west of Pemberton with a 2000 m, 15-hole drill program on the Road zone. Reconnaissance prospecting, mapping and geochemical sampling has also been carried out on the property. IP on the Breccia zone has identified two areas for follow up work in the coming year. Several new mineralized zones have been reported on the property in the course of the current project, in addition to those previously documented (MINFILE 092JW007, 017, 018).

Gold King Mining Inc did an IP survey on the **Gold King** (MINFILE 092JNE054) property north of Pemberton. To the southwest, near Whistler, Auramex Resource Corp reactivated their **Brandywine** (MINFILE 092JW001) property, beginning with some chip sampling and mapping. Drilling is planned.

Boston Bar/Harrison Lake

In January 2006 Northern Continental Resources terminated their option on the **Abo** (MINFILE 092HSW092) property near Harrison Lake. During the period of their option agreement (2002 to 2006) they spent an estimated $674 000 on the project. The property is presently wholly-owned by Copper Canyon Resources Ltd. Although work continued into December of 2005, no work has been reported on the Abo during 2006.

Pacific Coast Nickel Corp conducted airborne geophysics and ground magnetometer surveys in addition to geological mapping and prospecting on its Harrison Lake area projects **Big Nic**, **Emory Creek** and **Mount Parker-Mount McNair** (MINFILE 092HSW082, 093). Ground based magnetometer surveys were successful in locating and extending mineralization and identifying targets for follow-up on the Big Nic. At Emory Creek, a dunite-peridotite-pyroxenite ultramafic complex hosts sulphides of apparent magmatic origin. Airborne geophysics defined an area of interest at the Mount Parker-Mount McNair areas.

Saturn Minerals Inc, International Millennium Mining Corp and Sutcliffe Resources Ltd deferred major work on their claims in the Harrison Lake area in 2006. Some drill pads are prepared for a proposed 2007 program on the **Harrison Lake Massive Sulphide** (MINFILE 092HNW077) project, an International Millennium/Sutcliffe joint venture. Saturn hopes to drill its **Mascot** and **Gem** (MINFILE 092HNW001) properties in the coming year.

At the **Seneca** (MINFILE 092HSW013) property, west of Harrison Lake, Carat Exploration completed a December 2005 drill program early in 2006 and commissioned a 1080-line-km AeroTEM II airborne geophysical survey. The 2005-2006 holes intersected massive sulphide mineralization at the Seneca zone in the western portion of the property.

The Seneca deposit has been described as a zinc-lead-copper-silver Kuroko style massive sulphide body, explored since the 1920s. In 1962 a 260 tonne shipment sent to Britannia Mine graded 1.55% copper, 8.15% zinc, 154.28 g/t silver and 4.11 g/t gold. Similar values have been obtained in more recent Seneca zone drilling. A 2.6 m intercept graded 0.94% copper, 20.28% zinc, 100 g/t silver and 3.05 g/t gold in early 2006. The late 2006 4000 m drill program is designed to test a horizon correlative with the volcaniclastic unit of the Seneca zone.

Mosquito Consolidated Gold Mines Limited began work on the **Statlu Creek** aggregate project near Mission. The initial program consisted of a seismic survey, sonic drilling and sampling for placer gold.

The **Giant Copper** (MINFILE 092HSW001, 002, 027, 161) property of Imperial Metals Corporation is located approximately 35 km southeast of Hope. It was drilled in 2006 with the goal of testing the AM zone, a near-vertical mineralized breccia pipe, at depth. Complete results had not been received at the time of writing, but the company plans to continue exploration of the AM zone during 2007 (Figure 6.7).

The Giant Copper property hosts what appears to have been a strong hydrothermal system with copper-gold-silver-molybdenum mineralization and a vertical or subvertical breccia pipe having dimensions of approximately 200x300 m at surface and extending beyond depths of 550 m. The property, including the AM zone, has been explored since about 1930 with over 22 000 m of drilling and 6 km of underground workings.

Diamond-drill hole GCS06-01 intersected 296.7 m grading 0.53% copper, 13.44 g/t silver and molybdenum starting at a depth of 47.5 m.

There have been several historical reserve calculations. A goal of the present program is to update and increase the underground reserves at depth, based on the hypothesis that the breccia pipe could represent the deep root of a porphyry system. Postulated exploration analogues are the breccias of the Rio Blanco Cu Mo porphyry deposit in Chile.

Figure 6.7. A diamond drill rig at Giant Copper (Photo by S. Robertson).

OUTLOOK FOR 2007

The larger exploration projects of 2006 are expected to continue into 2007. Reactivation of other projects, such as Hushamu, and emergence of new exploration programs are anticipated. The following are among the projects with stated plans for 2007:

- Orca sand and gravel is to begin shipments of sand and gravel in early 2007;
- A bulk sample is planned at the Apple Bay quarry of Electra Gold Ltd;
- Drilling is ongoing at the Merry Widow property at the time of writing, and Grande Portage plans drilling along the Merry Widow trend and the Old Sport Horizon;
- Bitterroot Resources Ltd and Mineral Creek Ventures Inc expect to undertake underground bulk sampling of the Lower Linda vein and 900 zone on the Mineral Creek property in 2007;
- Western Copper is planning a 2007 program at Hushamu which is to include drilling at the NW Expo in March and completion of a pre-feasibility study by the end of the year;
- As of early December, a drill campaign remains underway at the Seneca property of Carat Exploration Inc;
- Compliance Energy Corporation has extended their option on the Raven coal property;
- Prophecy Resources Corp plans drilling to follow their surface exploration of the OK property in 2006;
- A major exploration campaign is underway at Myra Falls which will continue into 2007;

- Imperial Metals intends to continue exploration of the AM zone at their Giant Copper property in 2007;
- Doublestar Resources has been granted a permit for up to 4000 m of diamond drilling on the Century and BCD limestone properties.

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KOOTENAY REGION

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SUMMARY AND TRENDS

Exploration expenditures increased for the third straight year in 2006. Major projects included exploration for coal, tungsten, molybdenum, gold, lead, zinc and silver.

Exploration expenditures in 2006 are projected to be about $15.5 million, a 10% increase over the previous year (Figure 7.1). The portion of the total devoted to metals exploration was about 56%; the remainder was for coal (a significant 42%) and industrial minerals (2%).

An estimated 66 000 metres of exploration drilling was carried out in the Kootenay Region in 2006, an increase of 20% over 2005 (Figure 7.2). Of this total the vast majority, 70%, was drilling for coal (not including mine in-pit drilling), 27.5% was for minerals and 2.5% for industrial minerals. All of the coal exploration drilling was carried out by Elk Valley Coal Corporation.

Construction of the MAX molybdenum mine continued throughout the year. The projected start-up date is March 2007. The Lodgepole coal project entered the Environmental Assessment process.

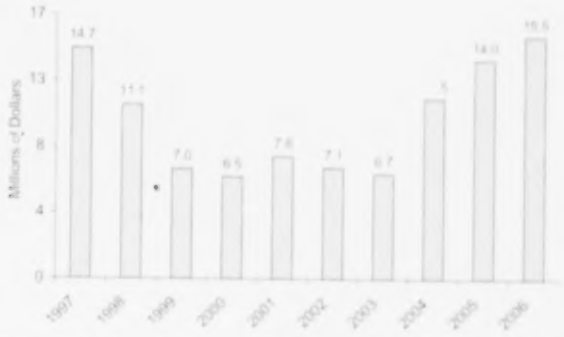

Figure 7.1. Annual exploration spending, in millions of dollars, Kootenay Region.

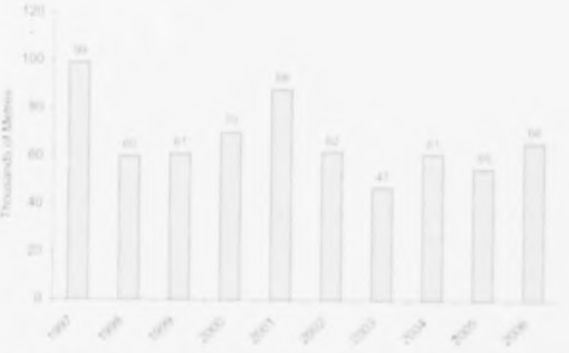

Figure 7.2. Annual exploration drilling, in thousands of metres, Kootenay Region. Note that prior to 2004 coal definition (in-pit) drilling at operating coal mines was included in the total.

OPERATING MINES AND QUARRIES

Current major producing mine and quarry locations in the Kootenay Region are shown on Figure 7.3 and basic data concerning these sites are listed in Table 7.1.

METALS

There were no metal mines operating in the Kootenay Region in 2006. As noted above, Roca Mines Inc.'s MAX molybdenum mine is expected to open in early 2007 (see below for details).

COAL

Elk Valley Coal Corporation, the world's second-largest supplier of seaborne metallurgical coal, operates five large open pit coal mines in the Elk valley area. Projected total 2006 coal production at the company's **Coal Mountain** (Figure 7.4), **Elkview**, **Line Creek**, **Greenhills** and **Fording River** operations is approximately 21.3 million tonnes of clean, predominantly metallurgical coal (see Table 7.1 for individual production and reserve statistics).

INDUSTRIAL MINERALS

The Kootenay Region continues to be an important source of a variety of industrial minerals, including magnesite, gypsum, silica, dolomite, limestone, tufa, flagstone, slate, dimension stone, crushed stone and slag. Highlights of this production follow.

Baymag Inc. produces high-quality magnesite from its open pit mine near **Mount Brussilof** (MINFILE 082JNW001), northeast of Radium (Figure 7.5). Magnesite is transported by truck to Exshaw, Alberta, where the company has facilities for producing calcined and fused magnesia (MgO). Production in 2006 was projected to be approximately 120 000 tonnes.

Figure 7.3. Mines, quarries and major exploration projects, Kootenay Region, 2006.

TABLE 7.1. PRODUCING MINES AND QUARRIES, KOOTENAY REGION, 2006

Mine	Operator	Deposit Type / Commodity	Forecast Production in 2006 (million tonnes)	Proven and Probable Reserves as of December 31, 2005 (million tonnes)	Reference for Reserves
Coal					
Coal Mountain	Elk Valley Coal Corporation	Metallurgical coal	2.0	26	Annual Information Form
Elkview	Elk Valley Coal Corporation	Metallurgical coal	4.8	246	Annual Information Form
Fording River	Elk Valley Coal Corporation	Metallurgical coal	8.1	239	Annual Information Form
Greenhills	Elk Valley Coal Corporation	Metallurgical coal	4.1	100	Annual Information Form
Line Creek	Elk Valley Coal Corporation	Metallurgical and thermal coal	2.3	17	Annual Information Form
Industrial Minerals					
4J	Georgia-Pacific Canada Inc.	Gypsum			
Crawford Bay	Imasco Minerals Inc.	Dolomite			
Elkhorn	BPB Canada Inc.	Gypsum			
Lime Creek	Imasco Minerals Inc.	Limestone			
Moberly	HCA Mountain Minerals (Moberly) Ltd.	Silica sand			
Mount Brussilof	Baymag Inc.	Magnesite			
North Fork	Roxul (West) Inc.	Monzonite (mineral wool)			
Rock Creek	Mighty White Dolomite Ltd.	Dolomite			
Winner	Roxul (West) Inc.	Gabbro (mineral wool)			

There are two gypsum producers in the Kootenay Region. BPB Canada Inc. operates the **Elkhorn** mine (MINFILE 082JSW021) east of Windermere, and Georgia-Pacific Canada Inc. operates the **Four J** mine (MINFILE 082JSW009) southeast of Canal Flats (Figure 7.6). Production at the Elkhorn mine was projected to be approximately 550 000 tonnes for 2006. Production for the Four J mine was projected to be 175 000 tonnes.

Silica is produced by HCA Mountain Minerals (Moberly) Ltd. from the **Moberly Mine** (MINFILE 082NE001) and plant, north of Golden. 2006 production was predicted to be 90 000 tonnes.

Imasco Minerals Inc. produces a variety of crushed and ground rock products at its Creston Operations Plant at **Sirdar**; rock types include limestone, dolomite, granite and quartzite. Raw sources for these products include an underground dolomite mine at **Crawford Bay** (MINFILE 082FNE113), a limestone quarry at **Lime Creek** (MINFILE 082FSW307) east of Salmo, and a granite quarry at **Sirdar** (MINFILE 082FSE072).

Mighty White Dolomite Ltd. produces a range of crushed and ground dolomite products from its quarry (MINFILE 082FSE200) and plant at **Rock Creek**.

The **Winner** gabbro quarry (MINFILE 082ESE265), west of Grand Forks (Figure 7.7), and the **North Fork** monzonite quarry, north of Grand Forks, both supply feed for the Roxul (West) Inc. mineral wool manufacturing plant in Grand Forks.

Figure 7.4. Coal Mountain Operations, Elk Valley Coal Corporation.

Figure 7.5. Mt. Brussilof magnesite mine, Baymag Inc.

Figure 7.6. 4J Gypsum mine, Georgia-Pacific Canada Inc.

EXPLORATION HIGHLIGHTS

Major 2006 mineral and coal exploration projects in the Kootenay Region are listed in Table 7.2 and their locations are shown on Figure 7.3. Each of these major exploration programs involved expenditures in excess of $100 000 on work that included ground disturbance, for example, drilling, trenching or bulk sampling. Most of the following information was derived from discussions with industry project staff, as well as company reports, presentations, press releases and Internet websites.

EAST KOOTENAYS

Stikine Gold Corporation's **Sullivan Deeps** project, one of the more exciting programs in the region over the past two years, was active again in 2006 with the commencement of their third deep drill-hole (known as SD3) targeting the Sullivan horizon north of the Kimberly Fault, approximately 8 km north of Kimberly (Figure 7.8). The Sullivan Deeps project is targeting a postulated "sister deposit" to the Pb-Zn Sullivan ore body (MINFILE 082FNE052), which sustained the Sullivan Mine and the town of Kimberley for over 90 years, until its permanent closure in late 2001. Both the Sullivan deposit and the Sullivan Deeps target are within a fault-bounded Middle Proterozoic structural sub-basin within the Aldridge Formation (Purcell Supergroup).

Deep drilling to the north of the Sullivan Mine, and north of the Kimberley normal fault, dates back to the 1970s. Stikine Gold's first deep hole, SD1 in 2004, was sited at the same location as the last hole drilled by Cominco in the mid 1990s, and was oriented to intersect a down-hole UTEM geophysical anomaly. SD1 intersected bands of massive and laminated zinc- and lead-bearing sulphides, reminiscent of the Sullivan deposit, at the Sullivan horizon and at a drill depth of 2736 metres. A follow-up geophysical survey suggested that this 10.5-metre zone containing sedex-style mineralization might be on the edge of a large new deposit. Drill-hole SD2, in 2005, located 1.3 km to the northeast of SD1, was sited to test this hypothesis. The Sullivan horizon was intersected at a drill depth of 2365 metres in SD2. The target turned out to consist of a 0.8-metre interval of laminated and semi-massive and brecciated sulphides mainly composed of pyrrhotite. This is believed to be analogous to the barren sulphide sheet found to the east of the Sullivan Mine. Based on results and interpretation of all drilling and geophysical surveys to date, Stikine Gold Corporation collared SD3, the third hole in the program, approximately 1.5 km north of SD1 in October 2006, at a site believed to be near the core of the target. It is expected to reach target depth in early 2007.

St. Eugene Mining Corporation is exploring two large Ag-Pb-Zn properties in the Moyie Lake area. The **St. Eugene** property, which includes the past-producing **St. Eugene Mine** (MINFILE 082GSW025) and the **Society Girl** (MINFILE 082GSW030) and **Guindon** (MINFILE 082GSW027) occurrences, is approximately 25 km south of Cranbrook (Figure 7.9), and the **Monroe Lake** property (MINFILE 082GSW035) is approximately 18 km southwest of Cranbrook. Both projects are targeting non-sedex-style mineralization (predominantly vein-type) in the lower portions of the Purcell Supergroup, in particular the Aldridge Formation. Work in 2006 included airborne geophysics, structural mapping and diamond drilling. Northwest-southeast-trending structures, including the St. Eugene break, appear to control mineralization on these properties, and mineralized targets potentially coincide with the intersection of these structures with north-south-trending synrift faults (associated with the sub-basins in the Aldridge Formation mentioned with respect to the Sullivan Deeps project above). Results on the Monroe Lake property included 5.0 m of 6.3% Zn, 4.04% Pb and 62 grams per tonne Ag. At the Society Girl target on the St. Eugene property drilling results included 1.6m with 13.8% Zn, 4.3% Pb and 44 grams per tonne Ag.

Figure 7.7. The Winner gabbro quarry near Grand Forks, which provides feed for the Roxul (West) Inc. rock wool plant in Grand Forks..

TABLE 7.2. MAJOR EXPLORATION PROJECTS, KOOTENAY REGION, 2006

Property	Operator	MINFILE	NTS	Commodity	Target Type	Work program	Metres of drilling (estimated in some cases)
Carmi	Hi Ho Silver Resources Ltd.	082ENW036	82E/11E	Mo	porphyry	IP, DD	2000
Castle Mountain/Bare Mountain	Elk Valley Coal Corporation	082JSE006, 008	82J/02W	coal	sedimentary	A, RC	23871
Coyote Creek	Eagle Plains Resources Ltd./CGC Inc.	82FNW071, 077, 078	82G/14W	gypsum	evaporite	DD	1614
Crowsnest	La Quinta Resources Corporation	082GSE070	82G/2E	Au	intrusion-related	A, TR	0
Greenhills Mine (Cougar North)	Elk Valley Coal Corporation	082JSE007	82J/2W	coal	sedimentary	RC	5115
Greenwood Gold	Merit Mining Corp.	082ESE032, 033, 041, 042	82E/2E	Au, Cu	mesothermal vein/polymetallic vein	TR, PF	0
Howell	La Quinta Resources Corporation	082GSE037, 048	82G/2E	Au	intrusion-related	DD	1070
Jersey-Emerald	Sultan Minerals Inc.	082FSW009, 010, 011, 218	82F/03E	Mo, W	porphyry (Mo) skarn (W)	DD	389
JJ	Astral Mining Corp.	082E083, 084, 085, 086, 087	82F/5W	Au	intrusion-related	G, GC, AB-GP, TR	0
Kena (Silver King zone)	Sultan Minerals Inc.	82FSW176	82F/6W	Ag, Cu, Au	polymetallic veins	DD	496
Line Creek Mine (Horseshoe Ridge)	Elk Valley Coal Corporation	082GNW021	82G/15W	coal	sedimentary	RC	2076
Midnight/IXL/OK	West High Yield (W.H.Y.) Resources Ltd.	082FSW119, 116, 117	82F/4W	Au	mesothermal vein	DD	2725
Monroe Lake	St. Eugene Mining Corporation	–	82G/5W	Pb, Zn, Ag	polymetallic vein	AB-GP, DD	624
Mt. Michael	Elk Valley Coal Corporation	082GNE022	82G/15W	coal	sedimentary	A, RC	9051
Oscar	Dajin Resources Corp.	082FSW022	82F/6E	Zn, Pb	oxide	A, GC	0
Purcell Block	Ruby Red Resources	082FSE116	82F/8E	Au	various	G, GC, A, TR	0
St. Eugene	St. Eugene Mining Corporation	82GSW023, 025, 030	82G/5W	Pb, Zn, Ag	polymetallic vein	AB-GP, DD	1421
Sandon Silver	Klondike Silver Corp.	082FNW043	82F/14W	Ag, Pb, Zn	polymetallic vein	GC, AB-GP MG, GC, TR	0
Snowshoe	Kingsman Resources Inc.	082ESE011	82E/2E	Au, Ag	mesothermal vein	A, DD	3000
Sphinx	Eagle Plains Resources Ltd.	082FNE004, 094, 095	82F/10E	Mo, W	porphyry	DD	1700
Strebbe	S. Strebchuk, Galena Construction	082FNW255	82F/13E	Au	skarn	A, UG (110m)	0
Sullivan Deeps	Stikine Gold Corporation	–	82F/16E	Zn, Pb, Ag	sedex	A, DD	1200
Wheeler Ridge	Elk Valley Coal Corporation	–	82G10/W	coal	sedimentary	A, RC	5869

Figure 7.8. Drillhole SD3 on the Sullivan Deep+ property, Stikine Gold Corporation.

Eagle Plains Resources Ltd. carried out its second diamond-drilling program on the **Sphinx** molybdenum property (MINFILE 082FNE004, 094 and 095) near Gray Creek Pass, 45 km west of Kimberley. The Sphinx property is underlain by sedimentary strata of the upper part of the Purcell Supergroup, including the Dutch Creek and Mt. Nelson formations, which have been intruded by Cretaceous quartz monzonite. Molybdenum (and associated tungsten) mineralization is associated with the intrusive contacts, and occurs as disseminations and within quartz-pyrite stockwork veins hosted by both sedimentary and intrusive rocks. A technical report submitted this year (prior to the 2006 drilling) outlined an inferred resource of 62 million tonnes grading 0.035% Mo, using a cut-off grade of 0.01% Mo.

Eagle Plains Resources Ltd., in a joint venture with CGC Inc., also drilled the **Coyote Creek** gypsum occurrence (MINFILE 082GNW071, 077, 078), 33 km southeast of Canal Flats. Gypsum in this part of the Rocky Mountains is associated with Devonian dolomitic carbonate rocks of the Burnais Formation. CGC Inc. has the right to earn a 100% interest in the property.

La Quinta Resources Corporation undertook exploration programs on each of two gold properties in the Flathead valley known as the Crowsnest (MINFILE 082GSE070) and Howell (MINFILE 082GSE037, 048) properties, located approximately 40 and 50 km southeast of Fernie, respectively. Mineralization at both properties is related to Cretaceous alkalic intrusions in Paleozoic and Mesozoic sedimentary rocks, including Paleozoic carbonates.

Ruby Red Resources worked on two blocks of claims in the Cranbrook area, the **Purcell Block** to the west and the **Rockies Block** to the east. Individual properties in the Purcell Block (includes MINFILE 082FSE116) that were the focus of exploration activity in 2006 include the **Gar** and the **Lov**. Ruby Red's holdings in the East Kootenays are mainly underlain by the Proterozoic Purcell Supergroup and are prospective for gold and base metals.

EAST KOOTENAY COALFIELDS

Exploration in the coal-bearing Jurassic-Cretaceous strata of the Mist Mountain Formation (collectively known as the East Kootenay coalfields where they occur in British Columbia) in 2006 was carried out exclusively by Elk Valley Coal Corporation. Their work contributed greatly to the overall exploration figures in southeast BC. Not including in-pit drilling at Elk Valley Coal's five mines, exploration expenditures totalled nearly $6.5 million and the exploration drilling totalled nearly 46 000 metres. Four of the five operations carried out major exploration programs in 2006, all aimed at establishing reserves outside the active pits.

Beginning in the south, Coal Mountain Operations continued to assess the potential of the **Wheeler Ridge** area in the Crowsnest Coalfield, roughly 19 km northeast of Fernie and immediately south of Parcel 73 of the Dominion Coal Block (MINFILE 082GNE008). This site is well removed (approximately 18 km to the northwest) from Coal Mountain, and is not structurally contiguous. Surface-mineable coal at Wheeler Ridge is of higher volatile-matter content than current typical products from Elk Valley's mines.

The other major coal exploration programs were in the Elk Valley Coalfield. Line Creek Operations drilled on **Horseshoe Ridge** (MINFILE 082GNE021), to extend

Figure 7.9. Drilling on St. Eugene property, Society Girl target, St. Eugene Mining Corporation.

reserves in the current Horseshoe Ridge pit. Line Creek also drilled on **Mt. Michael** (MINFILE 082GNE022), approximately 5 km north along strike from Horseshoe Ridge and 9 km southeast of Elkford. Surface-mineable coal-bearing strata on Mt. Michael are on the east limb of the Alexander Creek syncline and dip moderately to the west.

At the Greenhills Operations (MINFILE 082JSE007) drilling took place north of Cougar North Pit in an area referred to as the **Cougar North Extension**. Coal occurrences on the Greenhills Range are part of the Greenhills syncline.

Fording River Operations drilled on both **Castle Mountain** (MINFILE 082JSE008) and **Bare Mountain** (MINFILE 082JSE006), 5 and 10 kilometres, respectively, south of and along strike from active pits on Eagle Mountain (MINFILE 082FSE009), and 10 to 12 kilometres northeast of Elkford (Figure 7.10). Coal-bearing strata at these locations are preserved in the Alexander Creek syncline.

Cline Mining Corporation entered the Environmental Assessment Process with its **Lodgepole** coal project (082GSE028) in 2006. The Lodgepole property, which is 30 km southeast of Fernie in the southeastern part of the Crowsnest coalfield, comprises a dip-slope in Mist Mountain Formation. Cline Mining continued baseline environmental monitoring in 2006, but carried out no exploration activities.

Figure 7.10. Drilling on Castle Mountain, Elk Valley Coal Corporation.

WEST KOOTENAYS

Roca Mines Inc.'s **MAX** molybdenum project (MINFILE 082KNW003 and 004) is near the community of Trout Lake (Figure 7.11). The project has been in the construction phase throughout 2006 after receiving its Small Mine permit in late 2005, and should open in early 2007.

Metasediments of the Lower Cambrian to Middle Devonian Lardeau Group at the MAX property are intruded by the Cretaceous Trout Lake stock. The deposit is a pipe-like quartz vein stockwork that extends from surface to a depth of at least 1000 metres, in which molybdenite occurs mainly along margins of veins. The vein stockwork is best developed in close proximity to the margins of the intrusive and its associated offshoots.

A 2004 resource assessment of the MAX ore body calculated 1.01 million tonnes measured resources grading 1.01% MoS_2 at a cut-off grade of 0.50% MoS_2. Initial production will be from a high-grade zone containing 280 000 tonnes grading 1.95% MoS_2; production rate will be 500-tonne-per-day on a campaigned basis, for a total annual production of 72 000 tonnes. An on-site concentrator with a 1000 tonne-per-day rated capacity will be part of the operation.

The focus on Sultan Minerals Inc.'s **Jersey-Emerald** property (MINFILE 082FSW009, 010, 011 and 218) 10 km south of Salmo expanded to include tungsten as well

Figure 7.11. MAX molybdenum mine portal, Roca Mines Inc.

as molybdenum in 2006. Sultan has held the Jersey-Emerald property, which includes important past producers of zinc, lead and tungsten, for more than ten years. Exploration related to known occurrences of molybdenum was initiated in 2005, in response to rising prices; this work included a large underground drilling program. Molybdenum-bearing, granitic intrusion-hosted quartz stockworks were found to lie beneath the old tungsten mine workings in the East Dodger Mine area. The East Dodger Molybdenum Zone has been demonstrated to cover an area 975 metres by 120 metres over a vertical depth range of 150 metres, open in all directions.

Sultan Minerals personnel were also aware of six unmined tungsten targets reported by operator Placer Dome at the time of mine closure. These targets occur as broad linear bands trending for more than 1500 metres to the north and south of the old mine workings. In addition, another target referred to as the East Emerald Tungsten Zone, associated with a unit referred to historically as the "Lower Skarn Horizon", was identified by Sultan Minerals from historic mine plans and drill logs. This new zone lies between the Invincible and Dodger tungsten zones, and has been shown to extend more than 1100 metres in length and up to 300 metres down dip. Diamond drilling in 2006 focused on defining this zone; intersections included 16.6 metres grading 0.15% WO_3, and indicated that the zone ranges between 1.2 metres and 20 metres in thickness. Newly acquired resource calculations for the Invincible and Dodger zones, based on past diamond drilling, include just over 2.5 million tonnes averaging 0.37% WO_3 in the combined measured and indicated categories at a cut-off grade of 0.15% WO_3.

Sultan Minerals Inc. also drilled at the **Kena** property, 8 km south of Nelson. The Kena in recent years has been explored for gold associated with the Silver King intrusions. The focus in 2006 shifted to an extension of the Silver King zone, host to the historic copper-silver Silver King Mine (MINFILE 082FSW176), that was discovered by trenching in 2005. The drilling was designed to test the extent of disseminated copper and silver mineralization in Rossland Group footwall rocks adjacent to the Silver King, which was known for high-grade veins.

Astral Mining Corp. carried out a trenching, mapping and sampling program on the **Jumping Josephine**, or **JJ**, gold property. The main focus, and all of the trenching, in 2006 was on the JJ main zone, a relatively new (2003) discovery north of highway 3 and approximately 22 km west of Castlegar. Mineralization in the JJ main zone consists of quartz stockworks, vein-breccias and sheeted veins associated with a northeast-trending shear zone in mid-Jurassic Nelson-suite intrusions. Assays of channel samples from trench exposures included 21.43 grams per tonne Au over 5 metres in Trench T02. The JJ property also includes other recently-discovered mineralized zones as well as the historical Granville Mountain Mining Camp (MINFILE 082ESE083 through 087).

Klondike Silver Corporation continued to expand its holdings in the Sandon silver-lead-zinc camp (**Sandon Silver** project), including the addition of the past-producing **Payne** (MINFILE 082KSW006) and **Jackson** (MINFILE 082KSW015) mines. Work in 2006 included soil geochemistry, airborne and ground-based geophysics and trenching, and included work on the **Wonderful** (082FNW043), **Stenson** and **Hinckley** (082FNW013) properties. Klondike Silver's objective is to apply modern exploration techniques to geologically-favourable areas with overburden. The project plan calls for ore to be processed at the company's **Silvana** mill at the Sandon town-site. The Wonderful occurrence is hosted by argillite and slate of the Triassic Slocan Group intruded by granodiorite and quartz monzonite dikes. Mineralization occurs in a sheared and mineralized fracture, with brecciated zones of galena, sphalerite and country rock with siderite.

Related company Klondike Gold Corporation drilled the **Red Point** (MINFILE 082FSW366) gold-copper property, 3.5 km southwest of Trail. Known mineralization on the property includes massive sulphide gold-copper veins (similar to the Rossland camp), and an area of disseminated and fracture-controlled mineralization.

Dajin Resources Corp. undertook a large soil geochemical sampling program on the **Oscar** (or Oxide) property (MINFILE 82FSW022), 5.5 km east of Ymir. Soil sampling outlined a large area anomalous in zinc and lead, in an area with known occurrences of oxide mineralization in addition to potential for Kootenay Arc-style zinc and lead-sulphide mineralization. Soil samples with up to 8000 ppm Zn and 5000 ppm Pb were collected. A zone of Zn in soils consistently over 1000 ppm extended over a length of 950 metres.

BOUNDARY DISTRICT

There were numerous mineral exploration programs in the Boundary District, which includes the Kettle River, Midway-Greenwood, Grand Forks and Rossland areas, in 2006.

A large drilling program at the **Midnight**, **IXL** and **OK** properties (MINFILE 082FSW119, 116 and 117) on the western outskirts of Rossland was carried out by West High Yield (W.H.Y.) Resources Ltd. (Figure 7.12). Gold mineralization is associated with an ultramafic contact (OK ultramafic body) and a regional tectonic boundary, and consists of gold-bearing quartz-carbonate veins as opposed to the more typical Rossland-style Au-Cu sulphide-rich veins. Initial results included 30.45 grams per tonne Au over 5.64 metres in drillhole SR06-8. Assays of the OK ultramafic also suggest there is nickel potential on the property.

Merit Mining Corp. continued its preliminary assessment of its **Greenwood Gold** Project. Updated resource estimates on both the **Lexington-Grenoble**

Figure 7.12. Drilling on the Midnight property, West High Yield (W.H.Y.) Resources Ltd.

(082ESE041) deposit and **Golden Crown** (MINFILE 082ESE032, 033) property formed the basis for the assessment. Lexington-Grenoble deposit resources include 297 000 tonnes combined measured and indicated resources, containing 8.46 grams per tonne Au and 1.35% Cu at a cut-off grade of 6.0 grams per tonne Au equivalent. The Lexington-Grenoble deposit is hosted by an altered package of dacitic to andesitic tuffs. Mineralization, which is believed to have been emplaced during development of the Republic graben, is hosted by sub-parallel lenses of disseminated to narrow veins of pyrite, chalcopyrite and quartz (with or without native gold) within tuffs adjacent to a fault contact with serpentinite.

Merit Mining Corp. has approval for removal of a 10 000-tonne bulk sample from the Lexington-Grenoble deposit, as well as approval to construct a 250-tonne per day concentrator on the **Zip** property, also part of the Greenwood Gold Project. The company may soon make a production decision pending outcome of the ongoing preliminary assessment and the results of bulk sampling and processing.

Kingsman Resources Inc. carried out a diamond drilling program on its **Snowshoe** gold property (MINFILE 082ESE011), 3 km southeast of Greenwood in the Phoenix camp. Mineralization on the Snowshoe property is known to be associated with low-angle Eocene faulting, including the regional Snowshoe fault, and is hosted by quartz veins and breccia zones. Drilling in 2007 was targeted at geophysical anomalies and lows identified during airborne surveys flown in 2006.

Hi Ho Silver Resources Ltd. undertook an IP survey followed by drilling on its **Kettle River** molybdenum (also known as the Carmi) property (082ENW036), 11 km northwest of Beaverdell in the Kettle River valley. The Kettle River property is a porphyry-style molybdenum occurrence with copper, silver and gold.

OUTLOOK FOR 2007

There is every reason to believe that exploration and development activity levels will continue to increase in the Kootenays.

The highlight of 2007 will be the opening of the Roca Mines MAX molybdenum mine. The MAX will be the first metal mine in the region since the closure of the Sullivan in late 2001.

The intersection of Stikine Gold's SD3 drillhole with the Sullivan horizon, near the contact of the Lower and Middle Aldridge Formation, is being eagerly anticipated. A significant intersection of zinc and lead sulphides would have important implications for future exploration and development in the Purcell Basin.

Sustained high zinc prices will drive activity on several properties in the Kootenay Arc, including some past producers. This activity will likely include Sultan Minerals' Jersey-Emerald property, which, as noted above, is also a potential source of W and Mo, as well as further activity on the Oscar property.

A production decision on Merit Mining's Greenwood Gold project is possible in 2007, based on results of its preliminary assessment.

Continuing and expanding programs will probably take place at several well-known mining camps, including the Rossland, St. Eugene, Beaverdell and Beaton-Camborne camps.

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